

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: August 3, 2005, 10:02:38 ; Search time 167 Seconds  
(without alignments)  
963.427 Million cell updates/sec

Title: US-10-706-691-16

Perfect score: 416

Sequence: 1 MKERGAISRASRLRLAPF.....TAGVHIIREQDEAGPVEISA 416

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 2105692 seqs, 386760381 residues

Word size : 0

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : A\_Geneseq\_16Dec04:\*

- 1: Geneseqp1980s:\*
- 2: Geneseqp1990s:\*
- 3: Geneseqp2000s:\*
- 4: Geneseqp2001s:\*
- 5: Geneseqp2002s:\*
- 6: Geneseqp2003as:\*
- 7: Geneseqp2003bs:\*
- 8: Geneseqp2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	416	100.0	416	7	Abg75379 Predicted
2	416	100.0	416	7	Abg75377 Human INS
3	416	100.0	416	8	Ado47892 Human pro
4	416	100.0	416	8	Adg11056 Human the
5	383	92.1	383	8	Ado47895 Human mat
6	291	70.0	298	5	Aae14784 Human imm
7	268	64.4	270	8	Ado47887 Human pro
8	268	64.4	270	8	AdS11055 Human the
9	240	57.7	246	7	Abg75380 INSP052 e
10	235	56.5	237	8	Ado47890 Human mat
11	224	53.8	224	5	Aae26421 Human tra
12	214	51.4	256	8	Adm87341 Human pro
13	153	36.8	418	7	Abg75378 Murine IN
14	151	36.3	256	4	AAM24238 Human EST
15	151	36.3	256	8	Adm87787 Human EST
16	151	36.3	256	8	AdS12269 Human the
17	151	36.3	256	8	AdS12268 Human the
18	122	29.3	367	8	AQ65357 Novel hum
19	114	27.4	114	7	Abg75371 Human INS
20	100	24.0	100	7	Abg75376 Human INS
21	94	22.6	188	7	Abg75372 Human INS
22	58	13.9	58	3	AG01648 Human sec
23	33	7.9	33	8	Ado47889 Human sig
24	33	7.9	33	8	Ado47894 Human sig
25	31	7.5	31	7	Abg75373 Human INS

26	29	7.0	29	7	ABG75370	Human INS
27	25	6.0	25	7	ABG75374	Human INS
28	23	5.5	23	7	ABG75375	Human INS
29	9	2.2	63	7	ADJ83109	Immunoglo
30	9	2.2	63	7	ADJ83139	Immunoglo
31	9	2.2	63	8	ADK40849	Immunoglo
32	9	2.2	63	8	ADK40851	Immunoglo
33	9	2.2	333	7	ABO71364	Pseudomon
34	8	1.9	152	8	ADG22490	Cyanophag
35	8	1.9	179	7	ABO78158	Pseudomon
36	8	1.9	192	4	ABB62455	Drosophil
37	8	1.9	192	4	AAU38940	Drosophil
38	8	1.9	192	7	ADC35802	Drosophil
39	8	1.9	234	6	ABU31383	Protein e
40	8	1.9	303	6	ABU44830	Protein e
41	8	1.9	305	6	ABU47271	Protein e
42	8	1.9	305	6	ABU48104	Protein e
43	8	1.9	305	6	ABU15437	Protein e
44	8	1.9	338	7	ABO65915	Klebsiell
45	8	1.9	362	4	ABB62460	Drosophil

#### ALIGNMENTS

#### RESULT 1

ABG75379  
ID ABG75379 standard; protein; 416 AA.

XX AC ABG75379;

XX DT 22-APR-2004 (first entry)

XX DE Predicted INSP052 protein.

XX KW INSP052; human; cell proliferation; autoimmune disease; inflammation;  
KW cardiovascular disease; neurological disease; psychiatric disease;  
KW developmental disease; metabolic disorder; infection;  
KW immunoglobulin domain-containing cell surface recognition molecule.

XX OS Unidentified.

XX PN WO2003093316-A2.

XX PD 13-NOV-2003.

XX PF 30-APR-2003; 2003WO-GB001851.

XX PR 30-APR-2002; 2002GB-00009884.

XX PA (ARES-) ARES TRADING SA.

XX PI Davids AR, Fagan RJ, Phelps CB, Power C;

XX DR WPI; 2003-903655/82.

XX DR N-PSDB; ACH01277.

XX PT New INSP052 polypeptides and nucleic acids, useful in diagnosing and  
PT treating cell proliferative, autoimmune/inflammatory, cardiovascular,  
PT neurological, psychiatric, developmental, genetic or metabolic disorder.

XX Example 2; Fig 5; Opp; English.

XX The present invention provides the protein and coding sequences of a  
XX novel human immunoglobulin domain-containing cell surface recognition  
XX molecule known as INSP052. The polypeptide is useful as immunoglobulin  
XX domain-containing cell surface recognition molecule. The sequences may  
XX also be used in therapy or diagnosing a disease or in the manufacture of  
XX a medicament for treating a disease. The disease is a cell proliferative,  
XX autoimmune/inflammatory, cardiovascular, neurological, psychiatric,  
XX developmental, genetic or metabolic disorder, an infection or other  
XX pathological condition. The polypeptides and nucleic acids are essential  
XX to the structural integrity and homeostatic functioning of most tissues.

CC The present sequence is a polypeptide shown in the invention

XX  
SQ Sequence 416 AA;

Query Match 100.0%; Score 416; DB 7; Length 416;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 416; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKRERGALSASRALRLAPFVLLIQTDPLEGVNITSPVRLIHGTGKSALLSVQYSST 60  
DB 1 MKRERGALSASRALRLAPFVLLIQTDPLEGVNITSPVRLIHGTGKSALLSVQYSST 60  
QY 61 SSDRPVVKWQLKRDKPVTVVQSIGTEVIGTLRDPYDRIRLRFENGSLLLSDQLADEGT 120  
DB 61 SSDRPVVKWQLKRDKPVTVVQSIGTEVIGTLRDPYDRIRLRFENGSLLLSDQLADEGT 120  
QY 121 EVEISITDDFTTGEKTNILTVDPISRPQVLVASTTVELESEFTLNCSENGTKPSYTW 180  
DB 121 EVEISITDDFTTGEKTNILTVDPISRPQVLVASTTVELESEFTLNCSENGTKPSYTW 180  
QY 181 LKDGKPLNDLSRMLSPDQKVLITRVLMEDDDLVSCWENPISQGRSLPVKLTIVYRRSS 240  
DB 181 LKDGKPLNDLSRMLSPDQKVLITRVLMEDDDLVSCWENPISQGRSLPVKLTIVYRRSS 240  
QY 241 LYIILSTGGIFLLVTLVTVACWKPSKRQKQKLEKQNSLEYMDQNDRLKPEADTLP 300  
DB 241 LYIILSTGGIFLLVTLVTVACWKPSKRQKQKLEKQNSLEYMDQNDRLKPEADTLP 300  
QY 301 EQERKNPMALYILKDKDSPETEENPAPEPRSATPEPGPGYSPVAPVGRSPGLPIRSARR 360  
DB 301 EQERKNPMALYILKDKDSPETEENPAPEPRSATPEPGPGYSPVAPVGRSPGLPIRSARR 360  
QY 361 YPRSPARSPATGRTHSSPPRAPSPGSRSSASRTLRTAGVHIIREQDEAGPVEISA 416  
DB 361 YPRSPARSPATGRTHSSPPRAPSPGSRSSASRTLRTAGVHIIREQDEAGPVEISA 416

RESULT 2  
ABG75377

ID ABG75377 standard; protein; 416 AA.

XX  
AC ABG75377;

DT 22-APR-2004 (first entry)

XX  
DE Human INSP052 complete protein.

XX INSP052; human; cell proliferation; autoimmune disease; inflammation;  
KW cardiovascular disease; neurological disease; psychiatric disease;  
KW developmental disease; metabolic disorder; infection;  
KW immunoglobulin domain-containing cell surface recognition molecule.

XX  
OS Homo sapiens.

XX  
PN WO2003093316-A2.

XX  
PD 13-NOV-2003.

XX  
PF 30-APR-2003; 2003WO-GB001851.

XX  
PR 30-APR-2002; 2002GB-00009884.

XX  
PA (ARES-) ARES TRADING SA.

XX  
PI Davids AR, Fagan RJ, Phelps CB, Power C;

XX  
XX WPI; 2003-903655/82.

DR  
DR N-PSDB; ACH01275.

XX  
XX New INSP052 polypeptides and nucleic acids, useful in diagnosing and  
PT treating cell proliferative, autoimmune/inflammatory, cardiovascular,  
PT neurological, psychiatric, developmental, genetic or metabolic disorder.

XX

PS Claim 1; Page 67; Opp; English.

XX The present invention provides the protein and coding sequences of a  
CC novel human immunoglobulin domain-containing cell surface recognition  
CC molecule known as INSP052. The polypeptide is useful as immunoglobulin  
CC domain-containing cell surface recognition molecule. The sequences may  
CC also be used in therapy or diagnosing a disease or in the manufacture of  
CC a medicament for treating a disease. The disease is a cell proliferative,  
CC autoimmune/inflammatory, cardiovascular, neurological, psychiatric,  
CC developmental, genetic or metabolic disorder, an infection or other  
CC pathological condition. The polypeptides and nucleic acids are essential  
CC to the structural integrity and homeostatic functioning of most tissues.  
CC The present sequence is a polypeptide shown in the invention

XX  
SQ Sequence 416 AA;

Query Match 100.0%; Score 416; DB 7; Length 416;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 416; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKRERGALSASRALRLAPFVLLIQTDPLEGVNITSPVRLIHGTGKSALLSVQYSST 60  
DB 1 MKRERGALSASRALRLAPFVLLIQTDPLEGVNITSPVRLIHGTGKSALLSVQYSST 60  
QY 61 SSDRPVVKWQLKRDKPVTVVQSIGTEVIGTLRDPYDRIRLRFENGSLLLSDQLADEGT 120  
DB 61 SSDRPVVKWQLKRDKPVTVVQSIGTEVIGTLRDPYDRIRLRFENGSLLLSDQLADEGT 120  
QY 121 EVEISITDDFTTGEKTNILTVDPISRPQVLVASTTVELESEFTLNCSENGTKPSYTW 180  
DB 121 EVEISITDDFTTGEKTNILTVDPISRPQVLVASTTVELESEFTLNCSENGTKPSYTW 180  
QY 181 LKDGKPLNDLSRMLSPDQKVLITRVLMEDDDLVSCWENPISQGRSLPVKLTIVYRRSS 240  
DB 181 LKDGKPLNDLSRMLSPDQKVLITRVLMEDDDLVSCWENPISQGRSLPVKLTIVYRRSS 240  
QY 241 LYIILSTGGIFLLVTLVTVACWKPSKRQKQKLEKQNSLEYMDQNDRLKPEADTLP 300  
DB 241 LYIILSTGGIFLLVTLVTVACWKPSKRQKQKLEKQNSLEYMDQNDRLKPEADTLP 300  
QY 301 EQERKNPMALYILKDKDSPETEENPAPEPRSATPEPGPGYSPVAPVGRSPGLPIRSARR 360  
DB 301 EQERKNPMALYILKDKDSPETEENPAPEPRSATPEPGPGYSPVAPVGRSPGLPIRSARR 360  
QY 361 YPRSPARSPATGRTHSSPPRAPSPGSRSSASRTLRTAGVHIIREQDEAGPVEISA 416  
DB 361 YPRSPARSPATGRTHSSPPRAPSPGSRSSASRTLRTAGVHIIREQDEAGPVEISA 416

RESULT 3  
AD047892

ID AD047892 standard; protein; 416 AA.

XX  
AC AD047892;

DT 15-JUL-2004 (first entry)

XX  
DE Human protein SEQ ID NO:9.

XX human; virucide; anti-HIV; cytostatic; antiinflammatory; anti-allergic;  
KW immunosuppressive; antiarteriosclerotic; hypotensive; osteopathic;  
KW antianemic; neuroprotective; nootropic; antiparkinsonian; antiasthmatic;  
KW haemostatic; antidiabetic; cardiant; HIV; viral infection; cancer;  
KW inflammation; allergy; graft rejection; atherosclerosis; hypertension;  
KW osteoporosis; anaemia; Alzheimer's disease; Parkinson's disease; asthma;  
KW diabetes; myocardial infarction; haemophilia.

XX  
OS Homo sapiens.

XX  
PN WO2004007672-A2.

XX  
PD 22-JAN-2004.

XX



```
Db 301 EQERKNPMALYILKDKSDPETEENPAPEPRASATPGPGYSPVAPGRSPGLPIRSARR 360
Qy 361 YPRSPARSPATGRTHSSPPRAPSSPGRSASRSLRTAGVHIHQDEAGPVEISA 416
Db 361 YPRSPARSPATGRTHSSPPRAPSSPGRSASRSLRTAGVHIHQDEAGPVEISA 416

RESULT 5
ADO47895
ID ADO47895 standard; protein; 383 AA.
XX
AC ADO47895;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human mature protein SEQ ID NO:12.
XX
KW human; virucide; anti-HIV; cytostatic; antiinflammatory; antiallergic;
KW immunosuppressive; antiarteriosclerotic; hypotensive; osteopathic;
KW antianaemic; neuroprotective; nootropic; antiparkinsonian; antiasthmatic;
KW haemostatic; antidiabetic; cardiant; HIV; viral infection; cancer;
KW inflammation; allergy; graft rejection; atherosclerosis; hypertension;
KW osteoporosis; anaemia; Alzheimer's disease; Parkinson's disease; asthma;
KW diabetes; myocardial infarction; haemophilia.
XX
OS Homo sapiens.
XX
XX WO2004007672-A2.
XX
XX 22-JAN-2004.
XX
XX 09-JUL-2003; 2003WO-US021703.
XX
XX 12-JUL-2002; 2002US-0395402P.
XX
XX (NUVE-) NUVELO INC.
XX
XX Rupp F, Wang J, Zhou P, Wehrman T, Wang ZW, Tang YT;
XX
XX WPI; 2004-122914/12.
XX
XX N-PSDB; ADO47893.
XX
XX New isolated polypeptides and polynucleotides useful in diagnostics,
XX forensics, in preventing or treating diseases such as HIV and cancer, and
XX as drug targets.
XX
XX Claim 10; SEQ ID NO 12; 205pp; English.
XX
XX The invention relates to novel isolated polynucleotides and polypeptides
XX encoded by them. Also included are mutants or variants of the
XX polynucleotides and polypeptides. A polypeptide of the invention has
XX virucide, anti-HIV, cytostatic, antiinflammatory antiallergic,
XX immunosuppressive, antiarteriosclerotic, hypotensive, osteopathic,
XX antianaemic, neuroprotective, nootropic, antiparkinsonian, antiasthmatic,
XX haemostatic, antidiabetic, and cardiant activity. The composition and
XX methods are useful in diagnostics, forensics, gene or chromosome mapping,
XX identification of mutations responsible for genetic disorders or other
XX traits, in assessing biodiversity, or in producing many other types of
XX data and products dependent on DNA and amino acid sequences. They may
XX also be used in preventing or treating diseases (e.g. HIV and other viral
XX infections, cancer, inflammation, allergies, graft rejection,
XX atherosclerosis, hypertension, osteoporosis, anaemia, Alzheimer's
XX disease, Parkinson's disease, asthma, diabetes, myocardial infarction or
XX haemophilia). They may also be used as targets in drug screening. The
XX present sequence represents a polypeptide of the invention.
XX
XX Sequence 383 AA;
XX
XX Query Match 92.1%; Score 383; DB 8; Length 383;
XX Best Local Similarity 100.0%; Pred. No. 0;
XX Matches 383; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 34 VNITSPVRLIHGVGKALLSVOYSTSDRPPVVKQKRDKPVTVVQSIGTEVIGTLRP 93
Db 1 VNITSPVRLIHGVGKALLSVOYSTSDRPPVVKQKRDKPVTVVQSIGTEVIGTLRP 60
Qy 94 DYDRIRLFPENGSLILLSDLQADEGYEVEISITDDTFTGEKTIINLTVDVPIRPPQVLVA 153
Db 61 DYDRIRLFPENGSLILLSDLQADEGYEVEISITDDTFTGEKTIINLTVDVPIRPPQVLVA 120
Qy 154 STTVLELSAFTLNCSHENGTKPSYTWLKDGPFLNDSRMLSPDOKVLTITRVLMEDDD 213
Db 121 STTVLELSAFTLNCSHENGTKPSYTWLKDGPFLNDSRMLSPDOKVLTITRVLMEDDD 180
Qy 214 LYSWVENPISQGRSLPVKITVYRRSLYIILSTGGIFLLVTLVTVCACWPKSRKQKKL 273
Db 181 LYSWVENPISQGRSLPVKITVYRRSLYIILSTGGIFLLVTLVTVCACWPKSRKQKKL 240
Qy 274 EKONSLEYWDNDRLKPEADTLPRSGEQERKNPMALYILKDKSDPETEENPAPEPRAS 333
Db 241 EKONSLEYWDNDRLKPEADTLPRSGEQERKNPMALYILKDKSDPETEENPAPEPRAS 300
Qy 334 EPQPPGYSVPVAPGRSPGLPIRSARRYPRSPARSPATGRTHSSPPRAPSSPGRSASR 393
Db 301 EPQPPGYSVPVAPGRSPGLPIRSARRYPRSPARSPATGRTHSSPPRAPSSPGRSASR 360
Qy 394 TLRTAGVHIHQDEAGPVEISA 416
Db 361 TLRTAGVHIHQDEAGPVEISA 383

RESULT 6
AAE14784
ID AAE14784 standard; protein; 298 AA.
XX
AC AAE14784;
XX
DT 30-OCT-2002 (first entry)
XX
DE Human immunoglobulin superfamily protein (IGSF4) -4.
XX
KW Human; immunoglobulin superfamily protein-4; IGSF4-4; asthma;
KW immune system disorder; acquired immune deficiency syndrome; AIDS;
KW atherosclerosis; neurological disorder; Alzheimer's disease;
KW Parkinson's disease; developmental disorder; renal tubular acidosis;
KW anaemia; muscle disorder; cardiomyopathy; myocarditis; cancer;
KW cell proliferative disorder; arteriosclerosis; hepatitis.
XX
OS Homo sapiens.
XX
XX Key Location/Qualifiers
XX Peptide 1..333 /label= Signal_peptide
XX Protein 34..298 /note= "Mature IGSF4"
XX Region 43..231
XX /note= "Antigen precursor signal immunoglobulin fold
XX glycoprotein T cell surface transmembrane"
XX Domain 48..120 /label= Immunoglobulin_domain
XX Domain 161..219 /label= Immunoglobulin_domain
XX Domain 243..263 /label= Transmembrane_domain
XX
XX WO200240671-A2.
XX
XX 23-MAY-2002.
XX
XX 15-NOV-2001; 2001WO-US044974.
XX
XX 16-NOV-2000; 2000US-0249645P.
XX
XX (INCY-) INCYTE GENOMICS INC.
XX
```

PI Baughn MR, Lu DAM, Yue H, Elliott VS, Thangavelu K, Ramkumar J;  
 PI Lu Y, Lo TP, Gururajan R, Gandhi AR, Arvizu C, Yao MG;  
 XX WPI; 2002-519384/55.  
 DR N-PSDB; AAD36780.  
 XX  
 XX Novel human immunoglobulin superfamily polypeptide, useful in diagnosis,  
 PT prevention or treatment of immune system, neurological, developmental,  
 XX muscle and cell proliferative disorders.  
 PS Claim 1; Page 109-110; 122pp; English.  
 XX  
 CC The present sequence is human immunoglobulin superfamily protein (IGSPF) -  
 CC 4. The IGSPF polypeptide and polynucleotide are useful for diagnosing,  
 CC treating or preventing disorders associated with aberrant expression of  
 CC IGSPF e.g. immune system disorders (e.g. acquired immune deficiency  
 CC syndrome (AIDS), asthma, atherosclerosis, psoriasis, uveitis),  
 CC neurological disorders (e.g. Alzheimer's disease, Huntington's disease,  
 CC dementia, Parkinson's disease), developmental disorders (e.g. renal  
 CC tubular acidosis, epilepsy, anaemia), muscle disorders (e.g.  
 CC cardiomyopathy, myocarditis), or cell proliferative disorders (e.g.  
 CC arteriosclerosis, cirrhosis, hepatitis, and cancer). The polypeptide and  
 CC polynucleotide are also useful for assessing the effects of exogenous  
 CC compounds on their expression. The polypeptide is useful in drug  
 CC screening techniques, to analyse the proteome of a tissue or cell type,  
 CC as elements on a microarray. The polynucleotide is useful for creating  
 CC knock-in humanised animals or transgenic animals to model human diseases,  
 CC in somatic or germline gene therapy, to generate a transcript image of a  
 CC tissue or cell type, for detecting differences in the chromosomal  
 CC location due to translocation, inversion among normal, carrier or  
 CC affected individuals, and as hybridisation probes for mapping naturally  
 CC occurring genomic sequences  
 XX  
 SQ Sequence 298 AA;

Query Match 70.0%; Score 291; DB 5; Length 298;  
 Best Local Similarity 100.0%; Pred. No. 4.5e-274;  
 Matches 291; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 MKREGALSASRALRLAPFVYLLLIQTDPLEGVNTSPVRLIHGTGKALLSVOYST 60  
 DB 1 MKREGALSASRALRLAPFVYLLLIQTDPLEGVNTSPVRLIHGTGKALLSVOYST 60  
 QY 61 SSDRPVVKWQLKRDKPVTVVQSIGTEVIGTLRPDPYDRIRLFPENGSLLSDLQADEGTY 120  
 DB 61 SSDRPVVKWQLKRDKPVTVVQSIGTEVIGTLRPDPYDRIRLFPENGSLLSDLQADEGTY 120  
 QY 121 EVEISITDDTFTGKNTINLTVDVPISRPQVLVASTTVLESEAFNLNCHSHENGTKPSYTW 180  
 DB 121 EVEISITDDTFTGKNTINLTVDVPISRPQVLVASTTVLESEAFNLNCHSHENGTKPSYTW 180  
 QY 181 LKDGKPLNDSRMLLSPDKVLTITRVLMEDDDLYSCWVENPISQGRSLPVKITVYRRSS 240  
 DB 181 LKDGKPLNDSRMLLSPDKVLTITRVLMEDDDLYSCWVENPISQGRSLPVKITVYRRSS 240  
 QY 241 LYIILSTGGIFLLVTLVTVCAWKPSKRKKQKLEKQNSLEYMDQNDRLKP 291  
 DB 241 LYIILSTGGIFLLVTLVTVCAWKPSKRKKQKLEKQNSLEYMDQNDRLKP 291

RESULT 7  
 ID ADO47887  
 XX ADO47887 standard; protein; 270 AA.  
 AC ADO47887;  
 XX  
 XX 15-JUL-2004 (first entry)  
 XX  
 XX Human protein SEQ ID NO:4.  
 XX  
 XX human; virucide; anti-HIV; cytostatic; antiinflammatory; antiallergic;  
 KW immunosuppressive; antiarteriosclerotic; hypotensive; osteopathic;  
 KW antianaemic; neuroprotective; nootropic; antiparkinsonian; antiasthmatic;

KW haemostatic; antidiabetic; cardiant; HIV; viral infection; cancer;  
 KW inflammation; allergy; graft rejection; atherosclerosis; hypertension;  
 KW osteoporosis; anaemia; Alzheimer's disease; Parkinson's disease; asthma;  
 KW diabetes; myocardial infarction; haemophilia.  
 XX  
 OS Homo sapiens.  
 XX WO2004007672-A2.  
 XX 22-JAN-2004.  
 XX  
 XX 09-JUL-2003; 2003WO-US021703.  
 XX  
 XX 12-JUL-2002; 2002US-0395402P.  
 XX  
 XX (NUVE-) NUVELO INC.  
 XX  
 XX Rupp F, Wang J, Zhou P, Wehrman T, Wang ZW, Tang YT;  
 XX WPI; 2004-122914/12.  
 XX N-PSDB; ADO47886.  
 XX  
 PT New isolated polypeptides and polynucleotides useful in diagnostics,  
 PT forensics, in preventing or treating diseases such as HIV and cancer, and  
 PT as drug targets.  
 XX  
 PS Claim 10; SEQ ID NO 4; 205pp; English.

CC The invention relates to novel isolated polynucleotides and polypeptides  
 CC encoded by them. Also included are mutants or variants of the  
 CC polynucleotides and polypeptides. A polypeptide of the invention has  
 CC virucide, anti-HIV, cytostatic, antiinflammatory, antiallergic,  
 CC immunosuppressive, antiarteriosclerotic, hypotensive, osteopathic,  
 CC antianaemic, neuroprotective, nootropic, antiparkinsonian, antiasthmatic,  
 CC haemostatic, antidiabetic, and cardiant activity. The composition and  
 CC methods are useful in diagnostics, forensics, gene or chromosome mapping,  
 CC identification of mutations responsible for genetic disorders or other  
 CC traits, in assessing biodiversity, or in producing many other types of  
 CC data and products dependent on DNA and amino acid sequences. They may  
 CC also be used in preventing or treating diseases (e.g. HIV and other viral  
 CC infections, cancer, inflammation, allergies, graft rejection,  
 CC atherosclerosis, hypertension, osteoporosis, anaemia, Alzheimer's  
 CC disease, Parkinson's disease, asthma, diabetes, myocardial infarction or  
 CC haemophilia). They may also be used as targets in drug screening. The  
 CC present sequence represents a polypeptide of the invention.

SQ Sequence 270 AA;

Query Match 64.4%; Score 268; DB 8; Length 270;  
 Best Local Similarity 100.0%; Pred. No. 9.9e-252;  
 Matches 268; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 MKREGALSASRALRLAPFVYLLLIQTDPLEGVNTSPVRLIHGTGKALLSVOYST 60  
 DB 1 MKREGALSASRALRLAPFVYLLLIQTDPLEGVNTSPVRLIHGTGKALLSVOYST 60  
 QY 61 SSDRPVVKWQLKRDKPVTVVQSIGTEVIGTLRPDPYDRIRLFPENGSLLSDLQADEGTY 120  
 DB 61 SSDRPVVKWQLKRDKPVTVVQSIGTEVIGTLRPDPYDRIRLFPENGSLLSDLQADEGTY 120  
 QY 121 EVEISITDDTFTGKNTINLTVDVPISRPQVLVASTTVLESEAFNLNCHSHENGTKPSYTW 180  
 DB 121 EVEISITDDTFTGKNTINLTVDVPISRPQVLVASTTVLESEAFNLNCHSHENGTKPSYTW 180  
 QY 181 LKDGKPLNDSRMLLSPDKVLTITRVLMEDDDLYSCWVENPISQGRSLPVKITVYRRSS 240  
 DB 181 LKDGKPLNDSRMLLSPDKVLTITRVLMEDDDLYSCWVENPISQGRSLPVKITVYRRSS 240  
 QY 241 LYIILSTGGIFLLVTLVTVCAWKPSKR 268  
 DB 241 LYIILSTGGIFLLVTLVTVCAWKPSKR 268

RESULT 8  
ADS11055 standard; protein; 270 AA.  
XX  
AC ADS11055;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human therapeutic protein - SEQ ID 1292.  
XX  
KW antiinflammatory; neuroprotective; antianaemic; cytostatic; vulnerary;  
KW inflammatory; haematopoiesis; immunity; neurodegenerative; stem cell;  
KW aplastic anaemia; cancer; wound healing; gene therapy.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080148-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 30-SEP-2003; 2003WO-US030720.  
XX  
PR 02-OCT-2002; 2002US-0416186P.  
XX  
PA (NUVE-) NUVELO INC.  
XX  
PI Tang YT, Asundi V, Ren F, Zhang J, Wehrman T, Wang Z, Ma Y;  
PI Wang D, Chen R, Zhao QA, Wang J, Ghosh M, Xue AJ, Weng G, Zhou P;  
DR WPI; 2004-668857/65.  
DR N-PSDB; ADS10371.  
XX  
PT New polynucleotide, useful in preparing a composition for diagnosing or  
PT treating inflammatory, neurodegenerative or stem cell disorders, e.g.,  
PT aplastic anemia or cancer for promoting wound healing.  
XX  
PS Claim 20; SEQ ID NO 1292; 718pp; English.  
XX  
CC The invention relates to a novel isolated polynucleotide and the encoded  
CC polypeptide. The molecules of the invention demonstrate antiinflammatory,  
CC neuroprotective, antianaemic, cytostatic and vulnerary activities and may  
CC be useful in preparing a composition for diagnosing or treating  
CC inflammatory, haematopoietic, immune, neurodegenerative or stem cell  
CC disorders, such as aplastic anaemia or cancer, as well as for promoting  
CC wound healing. The molecules may also be utilised during gene therapy  
CC procedures. The current sequence is that of a human therapeutic protein  
CC of the invention. The current sequence is not shown explicitly within the  
CC specification but can be accessed from the WIFO web-site.  
XX  
SQ Sequence 270 AA;  
Query Match 64.4%; Score 268; DB 8; Length 270;  
Best Local Similarity 100.0%; Pred. No. 9.9e-252; Mismatches 0; Indels 0; Gaps 0;  
Matches 268; Conservative 0;  
Qy 1 MKREGALSRSALRALAPFVLLLIQTDPLEGVNITSPVRLIHGTGKSALLSVQYSST 60  
Db 1 MKREGALSRSALRALAPFVLLLIQTDPLEGVNITSPVRLIHGTGKSALLSVQYSST 60  
Qy 61 SSDRPVVKWQKRDKPVTVQSIGTEVIGTLRPDPYDRIRLFPENGSLLSLDQLADEGTY 120  
Db 61 SSDRPVVKWQKRDKPVTVQSIGTEVIGTLRPDPYDRIRLFPENGSLLSLDQLADEGTY 120  
Qy 121 EVELSITDDTFTGKTNLTVDVPISRPQVLVASTTVLELSEAFNLCSHENGKPSYTW 180  
Db 121 EVELSITDDTFTGKTNLTVDVPISRPQVLVASTTVLELSEAFNLCSHENGKPSYTW 180  
Qy 181 LKQKPLNDSRMLSPDQKVLTTIRVLMEDDDLYSCWVENPISQGRSLPKVITYRRSS 240  
Db 181 LKQKPLNDSRMLSPDQKVLTTIRVLMEDDDLYSCWVENPISQGRSLPKVITYRRSS 240  
Qy 241 LYIILSTGGIFLLVTLVTVACWKPSKR 268

Db 241 LYIILSTGGIFLLVTLVTVACWKPSKR 268  
RESULT 9  
ABG75380  
ID AEG75380 standard; protein; 246 AA.  
XX  
AC ABG75380;  
XX  
DT 22-APR-2004 (first entry)  
XX  
DE INSP052 extracellular domain protein.  
XX  
KW INSP052; human; cell proliferation; autoimmune disease; inflammation;  
KW cardiovascular disease; neurological disease; psychiatric disease;  
KW developmental disease; metabolic disorder; infection;  
KW immunoglobulin domain-containing cell surface recognition molecule.  
XX  
OS Unidentified.  
XX  
PN WO2003093316-A2.  
XX  
PD 13-NOV-2003.  
XX  
PF 30-APR-2003; 2003WO-GB001851.  
XX  
PR 30-APR-2002; 2002GB-00009884.  
XX  
PA (ARES-) ARES TRADING SA.  
XX  
PI Davids AR, Fagan RJ, Phelps CB, Power C;  
XX  
DR WPI; 2003-903655/82.  
DR N-PSDB; ACH01279.  
XX  
PT New INSP052 polypeptides and nucleic acids, useful in diagnosing and  
PT treating cell proliferative, autoimmune/inflammatory, cardiovascular,  
PT neurological, psychiatric, developmental, genetic or metabolic disorder.  
XX  
PS Claim 1; Fig 7; Opp; English.  
XX  
CC The present invention provides the protein and coding sequences of a  
CC novel human immunoglobulin domain-containing cell surface recognition  
CC molecule known as INSP052. The polypeptide is useful as immunoglobulin  
CC domain-containing cell surface recognition molecule. The sequences may  
CC also be used in therapy or diagnosing a disease or in the manufacture of  
CC a medicament for treating a disease. The disease is a cell proliferative,  
CC autoimmune/inflammatory, cardiovascular, neurological, psychiatric,  
CC developmental, genetic or metabolic disorder, an infection or other  
CC pathological condition. The polypeptides and nucleic acids are essential  
CC to the structural integrity and homeostatic functioning of most tissues.  
CC The present sequence is a polypeptide shown in the invention  
XX  
SQ Sequence 246 AA;  
Query Match 57.7%; Score 240; DB 7; Length 246;  
Best Local Similarity 100.0%; Pred. No. 1.6e-224;  
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 MKREGALSRSALRALAPFVLLLIQTDPLEGVNITSPVRLIHGTGKSALLSVQYSST 60  
Db 1 MKREGALSRSALRALAPFVLLLIQTDPLEGVNITSPVRLIHGTGKSALLSVQYSST 60  
Qy 61 SSDRPVVKWQKRDKPVTVQSIGTEVIGTLRPDPYDRIRLFPENGSLLSLDQLADEGTY 120  
Db 61 SSDRPVVKWQKRDKPVTVQSIGTEVIGTLRPDPYDRIRLFPENGSLLSLDQLADEGTY 120  
Qy 121 EVELSITDDTFTGKTNLTVDVPISRPQVLVASTTVLELSEAFNLCSHENGKPSYTW 180  
Db 121 EVELSITDDTFTGKTNLTVDVPISRPQVLVASTTVLELSEAFNLCSHENGKPSYTW 180  
Qy 181 LKQKPLNDSRMLSPDQKVLTTIRVLMEDDDLYSCWVENPISQGRSLPKVITYRRSS 240

Db 181 LKDGKPLNDSRMLLSPDQKVLITRVLMEDDDLVSCMVENPISQGRSLPVKITVYRRSS 240

## RESULT 10

ADO47890  
ID ADO47890 standard; protein; 237 AA.

XX AC ADO47890;

XX DT 15-JUL-2004 (first entry)

XX DE Human mature protein SEQ ID NO:7.

XX KW human; virucide; anti-HIV; cytostatic; antiinflammatory; antiallergic;  
KW immunosuppressive; antiarteriosclerotic; hypotensive; osteopathic;  
KW antianemic; neuroprotective; nootropic; antiparkinsonian; antiasthmatic;  
KW haemostatic; antidiabetic; cardiant; HIV; viral infection; cancer;  
KW inflammation; allergy; graft rejection; atherosclerosis; hypertension;  
KW osteoporosis; anaemia; Alzheimer's disease; Parkinson's disease; asthma;  
KW diabetes; myocardial infarction; haemophilia.

XX OS Homo sapiens.

XX PN WO2004007672-A2.

XX PD 22-JAN-2004.

XX PF 09-JUL-2003; 2003WO-US021703.

XX PR 12-JUL-2002; 2002US-0395402P.

XX PA (NUVE-) NUVELO INC.

XX PI Rupp F, Wang J, Zhou P, Wehrman T, Wang ZW, Tang YT;

XX DR WPI; 2004-122914/12.

XX DR N-PSDB; ADO47888.

XX PT New isolated polypeptides and polynucleotides useful in diagnostics,  
XX PT forensics, in preventing or treating diseases such as HIV and cancer, and  
XX PT as drug targets.

XX PS Claim 10; SEQ ID NO 7; 205pp; English.

XX CC The invention relates to novel isolated polynucleotides and polypeptides  
XX CC encoded by them. Also included are mutants or variants of the  
XX CC polynucleotides and polypeptides. A polypeptide of the invention has  
XX CC virucide, anti-HIV, cytostatic, antiinflammatory, antiallergic,  
XX CC immunosuppressive, antiarteriosclerotic, hypotensive, osteopathic,  
XX CC antianemic, neuroprotective, nootropic, antiparkinsonian, antiasthmatic,  
XX CC haemostatic, antidiabetic, and cardiant activity. The composition and  
XX CC methods are useful in diagnostics, forensics, gene or chromosome mapping,  
XX CC identification of mutations responsible for genetic disorders or other  
XX CC traits, in assessing biodiversity, or in producing many other types of  
XX CC data and products dependent on DNA and amino acid sequences. They may  
XX CC also be used in preventing or treating diseases (e.g. HIV and other viral  
XX CC infections, cancer, inflammation, allergies, graft rejection,  
XX CC atherosclerosis, hypertension, osteoporosis, anaemia, Alzheimer's  
XX CC disease, Parkinson's disease, asthma, diabetes, myocardial infarction or  
XX CC haemophilia). They may also be used as targets in drug screening. The  
XX CC present sequence represents a polypeptide of the invention.

XX SQ Sequence 237 AA;

Query Match 56.5%; Score 235; DB 8; Length 237;

Best Local Similarity 100.0%; Pred. No. 1.1e-219;

Matches 235; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 34 VNITSPVRLHGTGKSKALLSVQYSSTSDRPVVKWLKRDKPVTVVQSIGTEVIGTGRP 93

Db 1 VNITSPVRLHGTGKSKALLSVQYSSTSDRPVVKWLKRDKPVTVVQSIGTEVIGTGRP 60

Oy 94 DYDRIRLRFENGSLLLSLDLQADEGTYEVEISITDDTFTGKTNLTVDVPIRSPQVLVA 153

Db 61 DYDRIRLRFENGSLLLSLDLQADEGTYEVEISITDDTFTGKTNLTVDVPIRSPQVLVA 120

Oy 154 STTVLELSEAFNLCSHENGTKPSYTWLKDQKPLNDSRMLLSPDQKVLITRVLMEDDDD 213

Db 121 STTVLELSEAFNLCSHENGTKPSYTWLKDQKPLNDSRMLLSPDQKVLITRVLMEDDDD 180

Oy 214 LYSCMVENPISQGRSLPVKITVYRRSSLYIILSTGGIFLLVTLVTVCAWPKPSKR 268

Db 181 LYSCMVENPISQGRSLPVKITVYRRSSLYIILSTGGIFLLVTLVTVCAWPKPSKR 235

## RESULT 11

AAE26421

ID AAE26421 standard; protein; 224 AA.

XX AC AAE26421;

XX DT 13-DEC-2002 (first entry)

XX DE Human transmembrane protein (TMP)-7 protein.

XX KW Human; transmembrane protein; TMP-7; developmental disorder; epilepsy;  
KW prostatitis; infertility; neurological disorder; Alzheimer's disease;  
KW anaemia; stroke; cardiovascular disorder; hypertension; atherosclerosis;  
KW gastrointestinal disorder; anorexia; Crohn's disease; lipid metabolism;  
KW hypercholesterolaemia; hyperlipidaemia; cell proliferative disorder;  
KW psoriasis; autoimmune disorder; acquired immune deficiency syndrome;  
KW AIDS; cancer; gout; Grave's disease; transgenic; transgenic animal;  
KW gene therapy; antiinfectivity; anticonvulsant; hypotensive; nootropic;  
KW neuroprotective; cerebroprotective; antiinflammatory; cytostatic;  
KW antithyroid.

XX OS Homo sapiens.

XX Key Location/Qualifiers

XX FH Domain 51..71

XX FT /note= "Transmembrane domain"

XX PN WO200234783-A2.

XX PD 02-MAY-2002.

XX PF 26-OCT-2001; 2001WO-US049670.

XX PR 27-OCT-2000; 2000US-0244017P.

XX PR 22-NOV-2000; 2000US-0252855P.

XX PR 07-DEC-2000; 2000US-0251825P.

XX PR 12-DEC-2000; 2000US-0255085P.

XX PA (INCY-) INCYTE GENOMICS INC.

XX PI Warren BA, Xu Y, Yue H, Batra S, Burford N, Gandhi AR, Walia NK;  
PI Arvizu C, Tang YT, Lu DAM, Duggan BM, Baughn MR, Lee EA, Khan FA;  
PI Nguyen DB, Azinzai Y, Yao MG, Lal PG, Thangavelu K, Ramkumar J;  
PI Tran B, Ding L, Au-Young J;

XX WPI; 2002-463354/49.

XX DR N-PSDB; AD44098.

XX PT Novel human transmembrane proteins and polynucleotides useful for  
XX PT diagnosing, treating or preventing infertility, anaemia, hypertension,  
XX PT anorexia, hypercholesterolemia, cancer, gout, Grave's disease.

XX PS Claim 62; Page 132-133; 163pp; English.

XX CC The present invention relates to novel human transmembrane proteins (TMP)  
XX CC and polynucleotides encoding such proteins. Sequences of the invention  
XX CC are useful for treating diseases or conditions associated with abnormal  
XX CC expression of TMP such as disorders of reproduction (e.g. infertility,  
XX CC prostatitis), developmental (e.g. anaemia, epilepsy), gastrointestinal  
XX CC (e.g. anorexia, Crohn's disease), neurological (e.g. Alzheimer's disease,  
XX CC stroke), lipid metabolism (e.g. hypercholesterolaemia, hyperlipidaemia),

CC cardiovascular (e.g. atherosclerosis, hypertension), cell proliferative  
CC (e.g. cancer, psoriasis) and autoimmune disorders (e.g. acquired immune  
CC deficiency syndrome (AIDS), gout, Grave's disease). They are useful for  
CC creating knockout humanised animals or transgenic animals to model human  
CC disease. Sequences of the invention are also used in gene therapy. The  
CC present sequence is TMP-7 protein  
XX  
SQ Sequence 224 AA;  
  
Query Match 53.8%; Score 224; DB 5; Length 224;  
Best Local Similarity 100.0%; Pred. No. 5.3e-209; Mismatches 0; Indels 0; Gaps 0;  
Matches 224; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 193 MLLSPDKVLTITRLMEDDDLYSCWENPISQGRSLPVKITVYRRSLYIILSTGIGFL 252  
Db 1 MLLSPDKVLTITRLMEDDDLYSCWENPISQGRSLPVKITVYRRSLYIILSTGIGFL 60  
  
Qy 253 LVTLVTCACWKPKRQKLEKQNSLEYMDQNDRLKPADTLPGRGEQRKNPMALYI 312  
Db 61 LVTLVTCACWKPKRQKLEKQNSLEYMDQNDRLKPADTLPGRGEQRKNPMALYI 120  
  
Qy 313 LKDKDSPETENPAPEPSATEPGPGVSVSPAVPGSRGGLPIRSARRYPRSPARSPATG 372  
Db 121 LKDKDSPETENPAPEPSATEPGPGVSVSPAVPGSRGGLPIRSARRYPRSPARSPATG 180  
  
Qy 373 RTHSSPPRAPSPGRSRSASRTLTAGVHIIREQDEAGPVEISA 416  
Db 181 RTHSSPPRAPSPGRSRSASRTLTAGVHIIREQDEAGPVEISA 224  
  
RESULT 12  
ADM87341  
ID ADM87341 standard; protein; 256 AA.  
XX  
AC ADM87341;  
XX  
DT 03-JUN-2004 (first entry)  
XX  
DE Human protein SEQ ID NO:434.  
XX  
KW respiratory; cytostatic; antiarthritic; immunosuppressive; antiinflammatory;  
KW gastrointestinal; antibacterial; immunosuppressive; antidiabetic;  
KW antirheumatic; gene therapy; molecular weight marker; chromosome marker;  
KW chromosome tag; genetic fingerprinting; nutritional supplement; cancer;  
KW inflammatory condition; arthritis; inflammatory bowel disease;  
KW Crohn's disease; sepsis; rheumatoid arthritis; diabetes mellitus type 1;  
KW graft versus host disease; human.  
XX  
OS Homo sapiens.  
XX  
PN WO2004009834-A2.  
XX  
PD 29-JAN-2004.  
XX  
PF 19-JUL-2002; 2002WO-US022858.  
XX  
PR 21-JUL-2001; 2001US-0306971P.  
XX  
PR 28-MAR-2002; 2002US-00112944.  
XX  
XX (NUVE-) NUVELO INC.  
XX  
XX Tang YT, Yang Y, Weng G, Zhang J, Ren F, Xue A, Wang J;  
XX Wehrman T, Ghosh MJ, Wang D, Zhao QA, Wang Z;  
XX WPI; 2004-143291/14.  
XX N-PSDB; ADM87097.  
XX  
XX New isolated polynucleotides and polypeptides, useful for treating, e.g.  
XX cancer, lung or liver fibrosis, arthritis, inflammatory bowel disease,  
XX Crohn's disease, rheumatoid arthritis, diabetes mellitus type 1 or graft  
XX versus host disease.  
XX  
XX Claim 20; SEQ ID NO 434; 591pp; English.

XX The present invention describes an isolated polynucleotide (I): (a)  
CC comprising a nucleotide sequence selected from SEQ ID NO:1-244; or (b)  
CC which encodes a polypeptide with biological activity, where the  
CC polynucleotide hybridises to (I) under stringent hybridisation conditions  
CC or has greater than 99% sequence identity with (I). (I) has respiratory,  
CC cytotatic, antiarthritic, antiinflammatory, antidiabetic and antirheumatic,  
CC antibacterial, immunosuppressive, antidiabetic and antirheumatic  
CC activities, and can be used in gene therapy. (I) can be used for  
CC generating polynucleotides encoding chimeric or fusion proteins and  
CC heterologous protein sequences. The polynucleotides can be used to  
CC express recombinant protein for analysis, characterisation or therapeutic  
CC use; as markers for tissues in which the corresponding protein is  
CC preferentially expressed; as molecular weight markers on gels; as  
CC chromosome markers or tags to identify chromosomes or to map related gene  
CC positions; to compare with endogenous DNA sequences in patients to  
CC identify potential genetic disorders; as probes to hybridise and discover  
CC genes, related DNA sequences; as a source of information to derive PCR  
CC primers for genetic fingerprinting; as a probe to subtract-out known  
CC sequences in the process of discovering other novel polynucleotides; for  
CC selecting and making oligomers for attachment to a gene chip or other  
CC support, including for examination of expression patterns; to raise anti-  
CC protein antibodies using DNA immunisation techniques; and as an antigen  
CC to raise anti-DNA antibodies or elicit another immune response. The  
CC polynucleotides and polypeptides can also be used as nutritional sources  
CC or supplements, e.g. as a protein or amino acid supplement, as a carbon  
CC source, as a nitrogen source or as a source of carbohydrates. The  
CC polynucleotides and polypeptides can also be used to treat cancer. The  
CC compositions are useful for promoting better or faster closure of non-  
CC healing wounds, for the generation and regeneration of tissues, for gut  
CC protection or regeneration and treatment of lung or liver fibrosis,  
CC reperfusion injury in various tissues, and conditions resulting from  
CC systemic cytokine damage. The compositions can also be used to treat  
CC inflammatory conditions (e.g. arthritis, inflammatory bowel disease or  
CC Crohn's disease), sepsis, rheumatoid arthritis, diabetes mellitus type 1  
CC or graft versus host disease. The present sequence represents a novel  
CC human polypeptide sequence from the present invention. N.B. The sequences  
CC for this patent were obtained from the USPTO web site from an equivalent  
CC US patent US20040048249A1.  
XX  
SQ Sequence 256 AA;  
  
Query Match 51.4%; Score 214; DB 8; Length 256;  
Best Local Similarity 100.0%; Pred. No. 3.2e-199;  
Matches 214; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 1 MKERGALSPASRALRPVLLLIQTDPLEGVNITSPVRLIHGTGKSALLSVQYSST 60  
Db 1 MKERGALSPASRALRPVLLLIQTDPLEGVNITSPVRLIHGTGKSALLSVQYSST 60  
  
Qy 61 SSDRPVVKWQKRDKPVTVVQSIGTEVIGTLRPDYPDRIRLFPENGSLILSLDLQADEGTY 120  
Db 61 SSDRPVVKWQKRDKPVTVVQSIGTEVIGTLRPDYPDRIRLFPENGSLILSLDLQADEGTY 120  
  
Qy 121 EVEISITDDTFTGKTNLTVDVPISRPQVLVASTTTLSEAFITLNCSEHGHTKPSYTW 180  
Db 121 EVEISITDDTFTGKTNLTVDVPISRPQVLVASTTTLSEAFITLNCSEHGHTKPSYTW 180  
  
Qy 181 LKDGKPLNDSRMLSPDQKVLITITVLMEDDDL 214  
Db 181 LKDGKPLNDSRMLSPDQKVLITITVLMEDDDL 214  
  
RESULT 13  
ABG75378  
ID ABG75378 standard; protein; 418 AA.  
XX  
AC ABG75378;  
XX  
DT 22-APR-2004 (first entry)  
XX  
DE Murine INSP052 complete protein.  
XX



KW INSP052; human; cell proliferation; autoimmune disease; inflammation;  
KW cardiovascular disease; neurological disease; psychiatric disease;  
KW developmental disease; metabolic disorder; infection;  
KW immunoglobulin domain-containing cell surface recognition molecule.  
XX Mus sp.  
OS  
XX WO2003093316-A2.  
PN  
XX 13-NOV-2003.  
PD  
XX 30-APR-2003; 2003WO-GB001851.  
PF  
XX 30-APR-2002; 2002GB-00009884.  
PR  
XX (ARES-) ARES TRADING SA.  
PA  
XX Davids AR, Fagan RJ, Phelps CB, Power C;  
PI  
XX WPI; 2003-903655/82.  
DR N-PSDB; ACH01276.  
XX  
XX New INSP052 polypeptides and nucleic acids, useful in diagnosing and  
PT treating cell proliferative, autoimmune/inflammatory, cardiovascular  
PT neurological, psychiatric, developmental, genetic or metabolic disorder.  
XX  
XX Example 1; Page 68; Opp; English.  
PS  
XX The present invention provides the protein and coding sequences of a  
CC novel human immunoglobulin domain-containing cell surface recognition  
CC molecule known as INSP052. The polypeptide is useful as immunoglobulin  
CC domain-containing cell surface recognition molecule. The sequences may  
CC also be used in therapy or diagnosing a disease or in the manufacture of  
CC a medicament for treating a disease. The disease is a cell proliferative,  
CC autoimmune/inflammatory, cardiovascular, neurological, psychiatric,  
CC developmental, genetic or metabolic disorder, an infection or other  
CC pathological condition. The polypeptides and nucleic acids are essential  
CC to the structural integrity and homeostatic functioning of most tissues.  
CC The present sequence is a polypeptide shown in the invention  
XX  
SQ Sequence 418 AA;  
Query Match 36.8%; Score 153; DB 7; Length 418;  
Best Local Similarity 100.0%; Pred. No. 1.1e-139;  
Matches 153; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 65 PVWKQKRDKPVTWQSIGTEVIGTLRDPYDRIRLPENGSLLSLDLQADGTYVEI 124  
DB 65 PVWKQKRDKPVTWQSIGTEVIGTLRDPYDRIRLPENGSLLSLDLQADGTYVEI 124  
QY 125 SITDDTFTGKTNLTVDVPIRSPQVLVASTVLELSEAFITLNCSEHGTGKPSYTLKDG 184  
DB 125 SITDDTFTGKTNLTVDVPIRSPQVLVASTVLELSEAFITLNCSEHGTGKPSYTLKDG 184  
QY 185 KPLINDSRMLSPDQKVLITITVLMEDDDLYSC 217  
DB 185 KPLINDSRMLSPDQKVLITITVLMEDDDLYSC 217  
RESULT 14  
AAM24238  
ID AAM24238 standard; protein; 256 AA.  
XX  
XX AAM24238;  
XX  
XX 12-OCT-2001 (first entry)  
DT  
XX Human EST encoded protein SEQ ID NO: 1763.  
DE  
XX Human; sheep; pig; cow; fruit fly; yeast; hamster; macaque; horse;  
KW tomato; monkey; dog; sea urchin; expressed sequence tag; EST;  
KW diagnostics; forensic test; gene mapping; genetic disorder; biodiversity;  
KW gene therapy; nutrition.

XX Homo sapiens.  
OS  
XX WO200154477-A2.  
PN  
XX 02-AUG-2001.  
PD  
XX 25-JAN-2001; 2001WO-US002687.  
PF  
XX 25-JAN-2000; 2000US-00491404.  
PR 17-JUL-2000; 2000US-00617746.  
PR 03-AUG-2000; 2000US-00631451.  
PR 15-SEP-2000; 2000US-00663870.  
XX  
XX (HYSE-) HYSEQ INC.  
XX  
XX Tang YT, Liu C, Zhou P, Qian XB, Wang Z, Chen R, Asundi V;  
PI Cao Y, Drmanac RA, Zhang J, Werhman T;  
XX  
XX WPI; 2001-476164/51.  
DR N-PSDB; AAH98897.  
XX  
XX Isolated polypeptide for treatment of diseases, diagnostics, raising  
PT antibodies and research use.  
XX  
XX Claim 20; Page 1159-1160; 1275pp; English.  
PS  
XX The present invention provides the protein and coding sequences of novel  
CC proteins from a variety of organisms, including human, dog, cat, horse,  
CC cow, pig, hamster, monkey, macaque, yeast, bacteria, fruit fly, sea  
CC urchin and tomato. These were derived from expressed sequence tags (ESTs)  
CC from the organism of interest. They can be used in diagnostics,  
CC forensics, gene mapping, identification of mutations, to assess  
CC biodiversity and for nutritional purposes. The present sequence is a  
CC protein of the invention  
XX  
SQ Sequence 256 AA;  
Query Match 36.3%; Score 151; DB 4; Length 256;  
Best Local Similarity 100.0%; Pred. No. 6.2e-138;  
Matches 151; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 MKRREGALSRSRRLAPFVYLLLIQTDPLEGVNITSPVRLIHGTGKSALLSVQYSST 60  
DB 1 MKRREGALSRSRRLAPFVYLLLIQTDPLEGVNITSPVRLIHGTGKSALLSVQYSST 60  
QY 61 SSDRPVWQKRDKPVTWQSIGTEVIGTLRDPYDRIRLPENGSLLSLDLQADGTY 120  
DB 61 SSDRPVWQKRDKPVTWQSIGTEVIGTLRDPYDRIRLPENGSLLSLDLQADGTY 120  
QY 121 EVEISITDDTFTGKTNLTVDVPIRSPQVL 151  
DB 121 EVEISITDDTFTGKTNLTVDVPIRSPQVL 151  
RESULT 15  
ADM87787  
ID ADM87787 standard; protein; 256 AA.  
XX  
XX ADM87787;  
XX  
XX 03-JUN-2004 (first entry)  
DT  
XX Human EST derived amino acid sequence SEQ ID NO:880.  
DE  
XX respiratory; cytostatic; antiarthritic; antiinflammatory;  
KW gastrointestinal; antibacterial; immunosuppressive; antidiabetic;  
KW antirheumatic; gene therapy; molecular weight marker; chromosome marker;  
KW chromosome tag; genetic fingerprinting; nutritional supplement; cancer;  
KW inflammatory condition; arthritis; inflammatory bowel disease;  
KW Crohn's disease; sepsis; rheumatoid arthritis; diabetes mellitus type 1;  
KW graft versus host disease; human; expressed sequence tag; EST.  
XX

OS	Homo sapiens.	
XX		
PN	W02004009834-A2.	
XX		
PD	29-JAN-2004.	
XX		
XX	19-JUL-2002; 2002WO-US022858.	
XX		
PR	21-JUL-2001; 2001US-0306971P.	
PR	28-MAR-2002; 2002US-00112944.	
XX		
PA	(NUVE-) NUVELO INC.	
XX		
XX	Tang YT, Yang Y, Weng G, Zhang J, Ren F, Xue A, Wang J;	
PI	Wehrman T, Ghosh MJ, Wang D, Zhao QA, Wang Z;	
XX		
DR	WPI; 2004-143291/14.	
DR	N-PSDB; ADM87569.	
XX		

New isolated polynucleotides and polypeptides, useful for treating, e.g. cancer, lung or liver fibrosis, arthritis, inflammatory bowel disease, Crohn's disease, rheumatoid arthritis, diabetes mellitus type 1 or graft versus host disease.

Example 2; SEQ ID NO 880; 591pp; English.

The present invention describes an isolated polynucleotide (I): (a) comprising a nucleotide sequence selected from SEQ ID NO:1-244; or (b) which encodes a polypeptide with biological activity, where the polynucleotide hybridises to (I) under stringent hybridisation conditions or has greater than 99% sequence identity with (I). (I) has respiratory, cytosolic, antiarthritic, antiinflammatory, gastrointestinal, antibacterial, immunosuppressive, antidiabetic and antirheumatic activities, and can be used in gene therapy. (I) can be used for generating polynucleotides encoding chimeric or fusion proteins and heterologous protein sequences. The polynucleotides can be used to express recombinant protein for analysis, characterisation or therapeutic use; as markers for tissues in which the corresponding protein is preferentially expressed; as molecular weight markers on gels; as chromosome markers or tags to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridise and discover genes, related DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to subtract-out known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a gene chip or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunisation techniques; and as an antigen to raise anti-DNA antibodies or elicit another immune response. The polynucleotides and polypeptides can also be used as nutritional sources or supplements, e.g. as a protein or amino acid supplement, as a carbon source, as a nitrogen source or as a source of carbohydrates. The polynucleotides and polypeptides can also be used to treat cancer. The compositions are useful for promoting better or faster closure of non-healing wounds, for the generation and regeneration of tissues, for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage. The compositions can also be used to treat inflammatory conditions (e.g. arthritis, inflammatory bowel disease or Crohn's disease), sepsis, rheumatoid arthritis, diabetes mellitus type 1 or graft versus host disease. The present sequence represents an expressed sequence tag (EST) derived amino acid sequence from the present invention. N.B. The sequences for this patent were obtained from the USPTO web site from an equivalent US patent US20040048249A1.

Query Match 36.3%; Score 151; DB 8; Length 256;

Best Local Similarity 100.0%; Pred. No. 6.2e-138;

Matches 151; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 MKRERGALSRSALRLAPFVYLLLIQTDPLEGVNITSPVRLIHGTGKALLSVQYSST 60

61 SSDRPVVKWQKEDKPVTVVQSIGTEVIGTLRPDYDRIRLPENGSLILLSDLQADEGTY 120

61 SSDRPVVKWQKEDKPVTVVQSIGTEVIGTLRPDYDRIRLPENGSLILLSDLQADEGTY 120

121 EVEISITDDTFTGCKTINLTVDVPISRPQVL 151

121 EVEISITDDTFTGCKTINLTVDVPISRPQVL 151

Search completed: August 3, 2005, 10:05:37

Job time : 172 secs

Sequence 256 AA;

Query Match 36.3%; Score 151; DB 8; Length 256;

Best Local Similarity 100.0%; Pred. No. 6.2e-138;

Matches 151; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: August 3, 2005, 10:02:38 ; Search time 169 Seconds  
(without alignments)  
1260.503 Million cell updates/sec

Title: US-10-706-691-16  
Perfect score: 416  
Sequence: 1 MKRREGALSRSRRLAPF.....TAGVHIREQDEAGPVEISA 416

Scoring table: OLIGO  
Gapop 60.0 , Gapext 60.0

Searched: 1612378 seqs, 512079187 residues

Word size : 0  
Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : UniProt\_03.\*  
1: uniprot\_sprot.\*  
2: uniprot\_trembl.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	315	75.7	416	Q8N7I3	Q8N7I3 homo sapien
2	313	75.2	416	Q67IP8	Q67IP8 homo sapien
3	153	36.8	413	Q640R3	Q640R3 mus musculus
4	123	29.6	165	Q8ND35	Q8ND35 homo sapien
5	122	29.3	367	Q6ZWL4	Q6ZWL4 homo sapien
6	9	2.2	691	Q8A099	Q8A099 bacteroides
7	8	1.9	183	Q8SAV3	Q8SAV3 oryza sativ
8	8	1.9	183	Q7XGCA	Q7XGCA oryza sativ
9	8	1.9	226	Q7RA64	Q7RA64 plasmodium
10	8	1.9	251	Q8LM18	Q8LM18 oryza sativ
11	8	1.9	253	Q97JPI	Q97JPI clostridium
12	8	1.9	263	Q6L9V2	Q6L9V2 neocalanus
13	8	1.9	263	Q7NNR0	Q7NNR0 gloeobacter
14	8	1.9	287	Q616X5	Q616X5 oryza lat
15	8	1.9	288	Q8JIN6	Q8JIN6 oryza lat
16	8	1.9	297	Q616X2	Q616X2 oryza lat
17	8	1.9	297	Q816X7	Q816X7 oryza lat
18	8	1.9	303	Q89F66	Q89F66 bradyrhizob
19	8	1.9	305	1 LPXC ECOLI	P07652 escherichia
20	8	1.9	305	1 LPXC SALT1	Q8Z995 salmonella
21	8	1.9	305	1 LPXC SALT1	Q8ZRT9 salmonella
22	8	1.9	306	2 Q6LHV4	Q6LHV4 photobacter
23	8	1.9	321	2 Q616X6	Q616X6 oryza lat
24	8	1.9	335	2 Q7U9L4	Q7U9L4 synechococc
25	8	1.9	337	2 Q8S716	Q8S716 oryza sativ
26	8	1.9	340	1 IGB1 RAT	Q08836 rattus norv
27	8	1.9	345	2 Q7V4S9	Q7V4S9 prochloroc
28	8	1.9	350	2 Q03130	Q03130 saccharomyc
29	8	1.9	479	2 Q8ULG2	Q8ULG2 homo sapien
30	8	1.9	480	1 MTH4_DROME	Q9V817 drosophila
31	8	1.9	500	2 Q6XL69	Q6XL69 rutilus rut

ALIGNMENTS

RESULT 1

Q8N7I3 PRELIMINARY; PRT; 416 AA.  
AC Q8N7I3; 01-OCT-2002 (Tremblrel. 22, Created)  
DT 01-OCT-2002 (Tremblrel. 22, Last sequence update)  
DT 01-MAR-2004 (Tremblrel. 26, Last annotation update)  
DE Hypothetical protein FLJ25530.  
OS Homo sapiens (Human)  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
OX NCBI\_TaxID=9606;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC TISSUE=Brain;  
RA Tashiro H., Yamazaki M., Watanabe K., Kumagai A., Itakura S.,  
RA Fukuzumi Y., Fujimori Y., Komiyama M., Suzuki Y., Hata H.,  
RA Nakagawa K., Mizuno S., Morinaga M., Kawamura M., Sugiyama T.,  
RA Irie R., Otsuki T., Sato H., Nishikawa T., Sugiyama A., Kawakami B.,  
RA Nagai K., Isogai T., Sugano S.;  
RL Submitted (JUL-2002) to the EMBL/GenBank/DBJ databases.  
DR EMBL; AK098396; BAC05297.1; -  
DR InterPro; IPR007110; IG-like.  
DR InterPro; IPR003598; IG\_c2.  
DR Pfam; PF00047; IG; 1.  
DR SMART; SM00408; IGC2; 1.  
DR PROSITE; PS50835; IG LIKE; 1.  
SQ SEQUENCE 416 AA; 45994 MW; 47120CA9A00EE1CF CRC64;

Query Match 75.7%; Score 315; DB 2; Length 416;  
Best Local Similarity 99.8%; Pred. No. 2.3e-302;  
Matches 415; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MKRREGALSRSRRLAPFVYLLLIOTDPLEGVNITSPVRLIHGTGKSAALLSVQYSST 60  
Db 1 MKRREGALSRSRRLAPFVYLLLIOTDPLEGVNITSPVRLIHGTGKSAALLSVQYSST 60  
Qy 61 SSDSPVVKWQLKDKPVTTVQSIGTEVIGTLRPDYRDIRLRFENGSLLSLDLADEGTY 120  
Db 61 SSDSPVVKWQLKDKPVTTVQSIGTEVIGTLRPDYRDIRLRFENGSLLSLDLADEGTY 120  
Qy 121 EVEISITDDTPTGKTLINLTVDPISRPQVLVASTTVLESEAFNLNCHSHENGTKPSVTW 180  
Db 121 EVEISITDDTPTGKTLINLTVDPISRPQVLVASTTVLESEAFNLNCHSHENGTKPSVTW 180  
Qy 181 LKDGKPLINDSRMLLSPDKVLTITRVLMEDDDLVSCWVNPISQGRSLPKVITVYRSS 240  
Db 181 LKDGKPLINDSRMLLSPDKVLTITRVLMEDDDLVSCWVNPISQGRSLPKVITVYRSS 240  
Qy 241 LYIILSTGGIFLLVTLVTVACWPKSKRKKQKLEKQNSLEYMDQNDRLKPEADTLPRSG 300  
Db 241 LYIILSTGGIFLLVTLVTVACWPKSKRKKQKLEKQNSLEYMDQNDRLKPEADTLPRSG 300  
Qy 301 EQERKNPMALYILKDKDSPETENPAPEPRSATFPGPGYSVSPAVPGRSGLPIRSARR 360

Q8AV31 brachydanio  
Q9V818 drosophila  
Q6nnz3 drosophila  
Q86be7 drosophila  
Q6fv98 candida gla  
Q8ky2 vibrio chol  
Q8ll14 providencia  
Q08548 saccharomyc  
Q8yw62 bacillus th  
P44523 haemophilus  
Q7tss0 mus musculu  
Q6c455 varrowia li  
Q6inb5 xenopus lae  
Q66k08 mus musculu

```
Db 301 EQERKNPMALYILKDKSPETEENPAPEPRATEPGPGYSPVAVPGSPGLPIRSARR 360
Qy 361 YPRSPATGTRHSSPPRAPSPPGRSRSASRTLRAGVHHIREQDEAGPVEISA 416
Db 361 YPRSPATGTRHSSPPRAPSPPGRSRSASRTLRAGVHHIREQDEAGPVEISA 416

RESULT 2
Q67IP8
ID Q67IP8 PRELIMINARY; PRT; 416 AA.
AC Q67IP8;
DT 25-OCT-2004 (TrEMBLrel. 28, Created)
DT 25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
DT 25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
DE Hypothetical protein.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Liver;
RA Shen S., Moh M.C.;
RL "A gene related to human hepatocellular carcinoma.";
RL Submitted (JUL-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL: AY047587; AAQ03018.1; -.
DR InterPro: IPR003599; IG-like.
DR InterPro: IPR007110; IG-like.
DR InterPro: IPR003598; IG_c2.
DR Pfam: PF00047; IG; 1.
DR SMART: SM00409; IG; 2.
DR SMART: SM00408; IGC2; 1.
DR PROSITE: PS00835; IG_LIKE; 1.
KW Hypothetical protein.
SQ SEQUENCE 416 AA; 46055 MW; 788882298BEB4ABF CRC64;

Query Match 75.2%; Score 313; DB 2; Length 416;
Best Local Similarity 99.8%; Pred. No. 2.2e-300;
Matches 413; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 RERGALSRSALRLAPFVYLLLTQDPLEGVNITSPVRLIHGTGVSALLSVQYSTSS 62
Db 3 RERGALSRSALRLAPFVYLLLTQDPLEGVNITSPVRLIHGTGVSALLSVQYSTSS 62
Qy 63 DRPVVKQLKRDKPVTVVQSIGTEVIGTLRPDYDRIRLPENGSLLSLDQLADEGTYEV 122
Db 63 DRPVVKQLKRDKPVTVVQSIGTEVIGTLRPDYDRIRLPENGSLLSLDQLADEGTYEV 122
Qy 123 EISITDDTFTGKKTINLTVDVPISRPQVLVASTTVLELSEAFILNCSHENGTKPSYTWLK 182
Db 123 EISITDDTFTGKKTINLTVDVPISRPQVLVASTTVLELSEAFILNCSHENGTKPSYTWLK 182
Qy 183 DGKPLNDNRMLSPDQKVLITITVLMEDDDLYSCWENPISQGRSLPVKITVYRRSSLY 242
Db 183 DGKPLNDNRMLSPDQKVLITITVLMEDDDLYSCWENPISQGRSLPVKITVYRRSSLY 242
Qy 243 IILSTGGIFLAVTLVTVACWKPKRKKLEKNSLEYMDNDRLKPEADTILPRSGEQ 302
Db 243 IILSTGGIFLAVTLVTVACWKPKRKKLEKNSLEYMDNDRLKPEADTILPRSGEQ 302
Qy 303 ERKNPMALYILKDKSPETEENPAPEPRATEPGPGYSPVAVPGSPGLPIRSARRYP 362
Db 303 ERKNPMALYILKDKSPETEENPAPEPRATEPGPGYSPVAVPGSPGLPIRSARRYP 362
Qy 363 RSPARSPATGTRHSSPPRAPSPPGRSRSASRTLRAGVHHIREQDEAGPVEISA 416
Db 363 RSPARSPATGTRHSSPPRAPSPPGRSRSASRTLRAGVHHIREQDEAGPVEISA 416

RESULT 3
Q64OR3
ID Q64OR3 PRELIMINARY; PRT; 413 AA.
```

```
AC Q64OR3;
DT 25-OCT-2004 (TrEMBLrel. 28, Created)
DT 25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
DT 25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
DE 2900042E0IRik protein (Fragment).
GN Name=2900042E0IRik;
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6; TISSUE=Brain;
RX PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heish F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaby S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Vallalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettelman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smallus D.E., Schnerch A., Schein J.E.,
RA Jones S.J., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6; TISSUE=Brain;
RA Director MGC Project;
RL Submitted (SEP-2004) to the EMBL/GenBank/DBJ databases.
DR EMBL: BC082537; AAH82537.1; -.
FT NON TER 1
SQ SEQUENCE 413 AA; 45665 MW; B6EFC42D6D2CA3C1 CRC64;

Query Match 36.8%; Score 153; DB 2; Length 413;
Best Local Similarity 100.0%; Pred. No. 3.9e-142;
Matches 153; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 65 PVVKWQLKRDKPVTVVQSIGTEVIGTLRPDYDRIRLPENGSLLSLDQLADEGTYEVEI 124
Db 65 PVVKWQLKRDKPVTVVQSIGTEVIGTLRPDYDRIRLPENGSLLSLDQLADEGTYEVEI 119
Qy 125 SITDDTFTGKKTINLTVDVPISRPQVLVASTTVLELSEAFILNCSHENGTKPSYTWLKDG 184
Db 125 SITDDTFTGKKTINLTVDVPISRPQVLVASTTVLELSEAFILNCSHENGTKPSYTWLKDG 179
Qy 185 KPLNDNRMLSPDQKVLITITVLMEDDDLYSC 217
Db 185 KPLNDNRMLSPDQKVLITITVLMEDDDLYSC 212

RESULT 4
Q8ND35
ID Q8ND35 PRELIMINARY; PRT; 165 AA.
AC Q8ND35;
DT 01-OCT-2002 (TrEMBLrel. 22, Created)
DT 01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DT 01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DE Hypothetical protein DKFP5470159 (Fragment).
GN Name=DKFP5470159;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
```

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RN  SEQUENCE FROM N.A.
RP  TISSUE=Brain;
RC  Bloecker H., Boecker M., Brandt P., Mewes H.W., Weil B., Wiemann S.;
RL  Submitted (JUL-2002) to the EMBL/GenBank/DBJ databases.
DR  EMBL; AL834419; CAD39081.1; -.
KW  Hypothetical protein.
FT  NON TER
SQ  SEQUENCE 165 AA; 18161 MW; 5052FA978C437486 CRC64;

Query Match      29.6%; Score 123; DB 2; Length 165;
Best Local Similarity 100.0%; Pred. No. 7.8e-113; Mismatches 0; Indels 0; Gaps 0;
Matches 123; Conservative 0;

QY  294 DTLPRSGQERKNPMALYILKDKSPETEENPAPEPRGATEPGPGYSGVSPVAFGRSPGL 353
DB  43 DTLPRSGQERKNPMALYILKDKSPETEENPAPEPRGATEPGPGYSGVSPVAFGRSPGL 102
QY  354 PIRSAARYPRSPARSPATGRTHSSPPRAPSPGRSASRTLTAGVHIIRQDQAGPVE 413
DB  103 PIRSAARYPRSPARSPATGRTHSSPPRAPSPGRSASRTLTAGVHIIRQDQAGPVE 162
QY  414 ISA 416
DB  163 ISA 165

RESULT 5
Q6ZWL4 PRELIMINARY; PRT; 367 AA.
AC Q6ZWL4;
AT 05-JUL-2004 (TReMBLrel. 27, Created)
DT 05-JUL-2004 (TReMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TReMBLrel. 27, Last annotation update)
DE Hypothetical protein FLJ16002.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RA Suzuki O., Sasaki N., Aotsuka S., Shoji T., Ichihara T., Shiohata N.,
RA Matsumoto K., Hirano M., Sano S., Nomura R., Yoshikawa Y.,
RA Matsumura Y., Moriya S., Chiba E., Moniyama H., Onogawa S.,
RA Kaeriyama S., Satoh N., Matsunawa H., Takahashi E., Kataoka R.,
RA Kuga N., Kuroda A., Satoh I., Kamata K., Takami S., Terashima Y.,
RA Watanabe M., Sugiyama T., Irie R., Otsuki T., Sato H., Ota T.,
RA Wakamatsu A., Ishii S., Yamamoto J., Isono Y., Kawai-Hio Y., Saito K.,
RA Nishikawa T., Kimura K., Yamashita H., Matsuo K., Nakamura Y.,
RA Sekine M., Kikuchi H., Kanda K., Wagatsuma M., Murakawa K.,
RA Kanehori K., Takahashi-Fujii A., Oshima A., Sugiyama A., Kawakami B.,
RA Suzuki Y., Sugano S., Negahari K., Masuko Y., Nagai K., Isogai T.;
RL Submitted (JUL-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AK122595; BAC85486.1; -.
GO GO:0004872; F:receptor activity; IEA.
DR InterPro; IPR003599; IG.
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003598; IG_C2.
DR Pfam; PF00047; IG_1.
DR SMART; SM00409; IG_2.
DR SMART; SM00408; ICG2; 1.
DR PROSITE; PS50835; IG_LIKE; 1.
KW Receptor.
SQ SEQUENCE 367 AA; 40456 MW; 35956FA245A408F0 CRC64;

Query Match      29.3%; Score 122; DB 2; Length 367;
Best Local Similarity 100.0%; Pred. No. 1.6e-111;
Matches 122; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  96 RDRIRLFENGSLLSLDQLADGTYEVEISITDDTFTGKTLNLTVDVPIRSPQVLVAST 155
DB  96 RDRIRLFENGSLLSLDQLADGTYEVEISITDDTFTGKTLNLTVDVPIRSPQVLVAST 155

us-10-706-691-16.olog.rup

QY  156 TVLSESAFTLNCSHENGTKPSYTWLKGKPELLNDSRMLSPDQKVLITRVLMEDDDL 215
DB  156 TVLSESAFTLNCSHENGTKPSYTWLKGKPELLNDSRMLSPDQKVLITRVLMEDDDL 215
QY  216 SC 217
DB  216 SC 217

RESULT 6
Q8A099 PRELIMINARY; PRT; 691 AA.
AC Q8A099;
AT 01-JUN-2003 (TReMBLrel. 24, Created)
DT 01-JUN-2003 (TReMBLrel. 24, Last sequence update)
DT 01-MAR-2004 (TReMBLrel. 26, Last annotation update)
DE Putative outer membrane protein, probably involved in nutrient
DE binding.
DE OrderedLocusNames=BT4122;
GN Bacteroides thetaiotaomicron.
OS Bacteria; Bacteroidetes; Bacteroides (class); Bacteroidales;
OC Bacteroidaceae; Bacteroides.
OX NCBI_TaxID=818;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=VPI-5482 / ATCC 29148;
RX MEDLINE=22550858; PubMed=12663928; DOI=10.1126/science.1080029;
RA Xu J., Bjursell M.K., Himrod J., Deng S., Carmichael L.K.,
RA Chiang H.C., Hooper L.V., Gordon J.I.;
RL "A genomic view of the human-Bacteroides thetaiotaomicron symbiosis.";
RT Science 299:2074-2076(2003).
DR EMBL; AE016943; AA079227.1; -.
KW Complete proteome.
SQ SEQUENCE 691 AA; 77418 MW; A99BAC4FD2C6667C CRC64;

Query Match      2.2%; Score 9; DB 2; Length 691;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  32 EGVNITSPV 40
DB  428 EGVNITSPV 436

RESULT 7
Q8SAV3 PRELIMINARY; PRT; 183 AA.
AC Q8SAV3;
AT 01-JUN-2002 (TReMBLrel. 21, Created)
DT 01-JUN-2002 (TReMBLrel. 21, Last sequence update)
DT 01-OCT-2003 (TReMBLrel. 25, Last annotation update)
DE Hypothetical protein OSUNBA0051J07.10.
GN Name=OSUNBA0051J07.10;
OS Oryza sativa (Rice).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
OC Ehrhartoideae; Oryzae; Oryza.
OX NCBI_TaxID=4530;
RN [1]
RP SEQUENCE FROM N.A.
RA Wing R.A., Yu Y., Soderlund C., Chen M., Kim H.-R., Rambo T.,
RA Sasaki C., Henry D., Oates R., Simmons J.;
RL Submitted (FEB-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AC098566; AAL7123.1; -.
DR Gramene; Q8SAV3; -.
KW Hypothetical protein.
SQ SEQUENCE 183 AA; 20011 MW; 37F2293DCA9196AC CRC64;

Query Match      1.9%; Score 8; DB 2; Length 183;
Best Local Similarity 100.0%; Pred. No. 47; Mismatches 0; Indels 0; Gaps 0;
Matches 8; Conservative 0;
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Qy 387 RSRASRT 394
Db 76 RSRASRT 83

RESULT 8
Q7XGC4
ID Q7XGC4 PRELIMINARY; PRT; 183 AA.
AC Q7XGC4;
DT 01-OCT-2003 (TREMBlrel. 25, Created)
DT 01-OCT-2003 (TREMBlrel. 25, Last sequence update)
DE Hypothetical protein.
GN ORFNames=OSJNBa0051J07.10;
OS Oryza sativa (japonica cultivar-group).
OC Eukaryota; Viridiplantae; Streptophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
OC Ehrhartoideae; Oryzaceae; Oryza.
OX NCBI_TaxID=39947;
RN [1]
RP SEQUENCE FROM N.A.
RA The Rice Chromosome 10 Sequencing Consortium;
RT "In-depth view of structure, activity, and evolution of rice
RT chromosome 10.";
RL Science 300:1566-1569(2003).
RN [2]
RP SEQUENCE FROM N.A.
RA Buell C.R., Wing R.A., McCombie W.R., Messing J., Yuan Q.;
RL Submitted (MAY-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB017064; AAP52407.1; -.
DR Gramene; Q7XGC4; -.
KW Hypothetical protein.
SQ SEQUENCE 183 AA; 20011 MW; 37F2293DCA9196AC CRC64;

Query Match 1.9%; Score 8; DB 2; Length 183;
Best Local Similarity 100.0%; Pred. No. 47;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 387 RSRASRT 394
Db 76 RSRASRT 83

RESULT 9
Q7RA64
ID Q7RA64 PRELIMINARY; PRT; 226 AA.
AC Q7RA64;
DT 01-MAR-2004 (TREMBlrel. 26, Created)
DT 01-MAR-2004 (TREMBlrel. 26, Last sequence update)
DE Hypothetical protein.
GN Name=PY06639;
OS Plasmodium yoelii yoelii.
OC Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
OX NCBI_TaxID=73239;
RN [1]
RP SEQUENCE FROM N.A.
RA STRAIN=17XNL;
RX PubMed=1236865; DOI=10.1038/nature01099;
RA Carlton J.M., Anguioi S.V., Suh B.B., Kooij T.W., Perteau M.,
RA Silva J.C., Ermolaeva M.D., Allen J.E., Selengut J.D., Koo H.L.,
RA Peterson J.D., Pop M., Kosack D.S., Shumway M.P., Bidwell S.L.,
RA Shallow S.J., van Aken S.E., Riedmuller S.B., Feldblyum T.V.,
RA Cho J.K., Quackenbush J., Sedegah M., Shoabi A., Cummings L.M.,
RA Florens L., Yates F.R. III, Raine J.D., Sinden R.E., Harris M.A.,
RA Cunningham D.A., Preiser P.R., Bergman L.W., Vaidya A.B.,
RA van Lin L.H., Janse C.J., Waters A.P., Smith H.O., White O.R.,
RA Salzberg S.L., Venter J.C., Fraser C.M., Hoffman S.L., Gardner M.J.,
RA Carucci D.J.;
RT "Genome sequence and comparative analysis of the model rodent malaria
RT parasite Plasmodium yoelii yoelii.";
RL Nature 419:512-519(2002).
CC -!- CAUTION: The sequence shown here is derived from an

```

```

CC EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is
CC preliminary data.
DR EMBL; ABL01002273; EAA18887.1; -.
KW Hypothetical protein.
SQ SEQUENCE 226 AA; 26674 MW; CA5A0F07D1496B3A CRC64;

Query Match 1.9%; Score 8; DB 2; Length 226;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 269 KQKLEKQ 276
Db 35 KQKLEKQ 42

RESULT 10
Q8LM18
ID Q8LM18 PRELIMINARY; PRT; 251 AA.
AC Q8LM18;
DT 01-OCT-2002 (TREMBlrel. 22, Created)
DT 01-OCT-2002 (TREMBlrel. 22, Last sequence update)
DT 01-MAR-2004 (TREMBlrel. 26, Last annotation update)
DE Hypothetical protein OSJNBb0038A07.26;
GN Name=OSJNBb0038A07.26;
OS Oryza sativa (japonica cultivar-group).
OC Eukaryota; Viridiplantae; Streptophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
OC Ehrhartoideae; Oryzaceae; Oryza.
OX NCBI_TaxID=39947;
RN [1]
RP SEQUENCE FROM N.A.
RA Buell C.R., Yuan Q., Ouyang S., Liu J., Gansberger K., Kim M.M.,
RA Overton II L.L., Bera J.J., Tsitrin T., Krol M.I., Jarrahi B.B.,
RA Jin S.S., Koo H., Zismann V., Hsiao J., Blunt S., Vanaken S.S.,
RA Uterback T.T., Feldblyum T.V., Yang Q.Q., Haas B.J., Suh B.B.,
RA Peterson J.J., Quackenbush J., White O., Salzberg S.L., Fraser C.M.;
RL Submitted (MAR-2002) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RA Buell R.;
RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AC113948; AAM94543.1; -.
DR Gramene; Q8LM18; -.
KW Hypothetical protein.
SQ SEQUENCE 251 AA; 27363 MW; CA05BAF6DF0927C7 CRC64;

Query Match 1.9%; Score 8; DB 2; Length 251;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 RERGALS 10
Db 196 RERGALS 203

RESULT 11
Q97JP1
ID Q97JP1 PRELIMINARY; PRT; 253 AA.
AC Q97JP1;
DT 01-OCT-2001 (TREMBlrel. 18, Created)
DT 01-OCT-2001 (TREMBlrel. 18, Last sequence update)
DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)
DE Predicted lytic murein transglycosylase (N-term. LysM motif repeat
DE domain).
GN OrderedLocusNames=CAC1232;
OS Clostridium acetobutylicum.
OC Bacteria; Firmicutes; Clostridia; Clostridiales; Clostridiaceae;
OC Clostridium.
OX NCBI_TaxID=1488;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=ATCC 824 / DSM 792 / VKM B-1787;
RX MEDLINE=21359325; PubMed=11466286;

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RX DOI=10.1128/JB.183.16.4823-4838.2001;
RA Noelling J., Breton G., Omeichenko M.V., Makarova K.S., Zeng Q.,
RA Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.,
RA Tatusov R.L., Sabathe F., Doucette-Stamm L.A., Soucaille P.,
RA Daly M.J., Bennett G.N., Koonin E.V., Smith D.R.;
RT "Genome sequence and comparative analysis of the solvent-producing
RT bacterium Clostridium acetobutylicum.";
RL J. Bacteriol. 183:4823-4838(2001).
DR EMBL; AB007636; AAK79204.1; -.
DR PIR; A97052; A97052.
DR GO; GO:0016998; P:cell wall catabolism; IEA.
DR InterPro; IPR002482; LysM.
DR InterPro; IPR011105; S1eB hydro.
DR Pfam; PF07486; Hydrolase_2; 1.
DR Pfam; PF01476; LysM; 2.
DR SMART; SM00257; LysM; 2.
KW Complete proteome.
SQ SEQUENCE 253 AA; 26927 MW; 5B1A03BD48BB09C3 CRC64;

Query Match 1.9%; Score 8; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 64;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 108 LLSDLQLA 115
DB 94 LLSDLQLA 101
|||||

RESULT 12
Q6L9V2 PRELIMINARY; PRT; 263 AA.
AC Q6L9V2;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE Cytochrome c oxidase subunits III.
GN Name=COIII;
OS Neocalanus cristatus.
OG Mitochondrion.
OC Eukaryota; Metazoa; Arthropoda; Crustacea; Maxillopoda; Copepoda;
OC Calanoida; Calanidae; Neocalanus.
OX NCBI_TaxID=119368;
RN [1]
RP SEQUENCE FROM N.A.
RX PubMed=15145056;
RA Machida R.J., Miya M.U., Nishida M., Nishida S.;
RT "Large-scale gene rearrangements in the mitochondrial genomes of two
RT calanoid copepods Eucalanus bungii and Neocalanus cristatus
RT (Crustacea), with notes on new versatile primers for the srRNA and COI
RT genes.";
RL Gene 332:71-78(2004).
CC -!- FUNCTION: Subunits I, II and III form the functional core of the
CC enzyme complex (By similarity).
CC -!- CATALYTIC ACTIVITY: 4 ferrocyclochrome c + O(2) = 4 ferriocyclochrome
CC c + 2 H(2)O.
CC -!- SIMILARITY: Belongs to the cytochrome c oxidase subunit 3 family.
DR EMBL; AB091773; BAD19006.1; -.
DR GO; GO:0016021; C:integral to membrane; IEA.
DR GO; GO:0005739; C:mitochondrion; IEA.
DR GO; GO:0004123; F:cytochrome-c oxidase activity; IEA.
DR GO; GO:0016491; F:oxidoreductase activity; IEA.
DR GO; GO:0006118; P:electron transport; IEA.
DR InterPro; IPR00298; CytC_oxdse_III.
DR Pfam; PF00510; COX3; 1.
DR ProDom; PD000382; CytC_oxdse_III; 1.
DR PROSITE; PS0253; COX3; 1.
KW Mitochondrion; Oxidoreductase; Transmembrane.
SQ SEQUENCE 263 AA; 30086 MW; F277429A637D861F CRC64;

Query Match 1.9%; Score 8; DB 2; Length 263;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 250 IFLLVTLV 257
DB 214 IFLLVTLV 221
|||||

RESULT 13
Q7NNR0 PRELIMINARY; PRT; 263 AA.
AC Q7NNR0;
DT 01-MAR-2004 (TrEMBLrel. 26, Created)
DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE G10350 protein.
GN OrderedLocNames=g10350;
OS Gloeobacter violaceus.
OC Bacteria; Cyanobacteria; Chroococcales; Gloeobacter.
OX NCBI_TaxID=33072;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=PCC 7421;
RX MEDLINE=22977040; PubMed=14621292;
RA Nakamura Y., Kaneko T., Sato S., Mimuro M., Miyashita H., Tsuchiya T.,
RA Sasamoto S., Watanabe A., Kawashima K., Kishida Y., Kiyokawa C.,
RA Kohara M., Matsumoto M., Matsuno A., Nakazaki N., Shimpō S.,
RA Takeuchi C., Yamada M., Tabata S.;
RT "Complete genome structure of Gloeobacter violaceus PCC 7421, a
RT cyanobacterium that lacks thylakoids.";
RL DNA Res. 10:137-145(2003).
DR EMBL; AP006569; BAC88291.1; -.
KW Complete proteome.
SQ SEQUENCE 263 AA; 30782 MW; 5B05B2B2007DE17F CRC64;

Query Match 1.9%; Score 8; DB 2; Length 263;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 351 PGLPIRSA 358
DB 6 PGLPIRSA 13
|||||

RESULT 14
Q616X5 PRELIMINARY; PRT; 287 AA.
AC Q616X5;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE Transformer-2b4.
GN Name=Tra2b4;
OS Oryzias latipes (Medaka fish) (Japanese ricefish).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;
OC Belontiiformes; Adrianichthyidae; Oryziinae; Oryzias.
OX NCBI_TaxID=8090;
RN [1]
RP SEQUENCE FROM N.A.
RA Shiraihi E., Imazato H., Yamamoto T., Yokoi H., Abe S., Kitano T.;
RT "Identification of two teleost homologs of the Drosophila sex
RT determination factor, transformer-2 in medaka (Oryzias latipes).";
RL Mech. Dev. 121:991-996(2004).
DR EMBL; AB159273; BAD24703.1; -.
DR InterPro; IPR000504; RNA_rec_mot.
DR Pfam; PF00076; RRM_1; 1.
DR SMART; SM00360; RRM; 1.
DR PROSITE; PS0102; RRM; 1.
DR PROSITE; PS00030; RRM_RNP_1; UNKNOWN 1.
SQ SEQUENCE 287 AA; 33003 MW; ECB9AD3743027E2B CRC64;

Query Match 1.9%; Score 8; DB 2; Length 287;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 363 RSPARSPA 370  
| | | | |  
Db 27 RSPARSPA 34

## RESULT 15

Q8JING PRELIMINARY; PRT; 288 AA.  
AC Q8JING;  
DT 01-OCT-2002 (TRENBLrel. 22, Created)  
DT 01-OCT-2002 (TRENBLrel. 22, Last sequence update)  
DT 01-MAR-2004 (TRENBLrel. 26, Last annotation update)  
DE Transformer-2b.  
GN Name=Tra2b;  
OS Oryzias latipes (Medaka fish) (Japanese ricefish).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;  
OC Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;  
OC Belontiiformes; Adrianichthyidae; Oryziinae; Oryzias.  
OX NCBI\_TaxID=8090;  
RN [1]  
RP SEQUENCE FROM N.A.  
RA Shiraishi E., Imazato H., Yamamoto T., Yokoi H., Abe S., Kitano T.;  
RT "Identification of two teleost homologs of the Drosophila sex  
determination factor, transformer-2 in medaka (Oryzias latipes).";  
RL Mech. Dev. 121:991-996(2004).  
DR EMBL; AB079122; BAC06514.1; -.  
DR HSSP; Q9VSJ5; IHL6.  
DR InterPro; IPR000504; RNA\_rec\_mot.  
DR Pfam; PF00076; RRM\_1; 1.  
DR SMART; SM00360; RRM; 1.  
DR PROSITE; PS50102; RRM; 1.  
DR PROSITE; PS00030; RRM\_RNP\_1; UNKNOWN\_1.  
SQ SEQUENCE 288 AA; 32991 MW; 8892AA9D1326FFF2 CRC64;

Query Match 1.9%; Score 8; DB 2; Length 288;  
Best Local Similarity 100.0%; Pred. No. 72;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 363 RSPARSPA 370  
| | | | |  
Db 28 RSPARSPA 35

Search completed: August 3, 2005, 10:08:31  
Job time : 171 secs



GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: August 3, 2005, 10:02:38 ; Search time 41 Seconds  
(without alignments)  
976.248 Million cell updates/sec

Title: US-10-706-691-16  
Perfect score: 416  
Sequence: 1 MKRGRGALSRSARLRAPF.....TAGVHIHQDEAGFVEISA 416

Scoring table: OLIGO

Searched: 283416 seqs, 96216763 residues  
Word size : 0

Total number of hits satisfying chosen parameters: 283416  
Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries  
Database :

PIR 79:.\*  
1: pir1:.\*  
2: pir2:.\*  
3: pir3:.\*  
4: pir4:.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	8	1.9	253	2 A97052	probable lytic mur
2	8	1.9	305	1 BVECEA	UDP-3-O-[3-hydroxy
3	8	1.9	305	2 AC0519	UDP-3-O-[3-hydroxy
4	8	1.9	305	2 D85492	UDP-3-O-[3-hydroxy
5	8	1.9	305	2 D90641	UDP-3-O-[3-hydroxy
6	8	1.9	619	2 S67067	probable membrane
7	8	1.9	744	2 B64049	outer membrane pro
8	8	1.9	3488	2 T34418	hypothetical prote
9	7	1.7	50	2 F82656	hypothetical prote
10	7	1.7	68	2 T30399	hypothetical prote
11	7	1.7	89	2 S25601	ubiquinol-cytochro
12	7	1.7	116	2 D97116	uncharacterized co
13	7	1.7	116	2 H95414	hypothetical prote
14	7	1.7	121	2 S17860	phospholipase A2 (
15	7	1.7	126	1 RSDV7	ribosomal protein
16	7	1.7	128	2 D46178	probable transcrip
17	7	1.7	128	2 E46178	probable transcrip
18	7	1.7	138	1 H64434	hypothetical prote
19	7	1.7	151	2 AG1990	hypothetical prote
20	7	1.7	152	2 D72630	hypothetical prote
21	7	1.7	154	2 S76225	hypothetical prote
22	7	1.7	170	2 T25399	hypothetical prote
23	7	1.7	180	2 T28938	hypothetical prote
24	7	1.7	182	2 F83378	hypothetical prote
25	7	1.7	192	2 G71920	hypothetical prote
26	7	1.7	192	2 C64591	conserved hypothet
27	7	1.7	196	2 T15917	hypothetical prote
28	7	1.7	197	2 T18918	hypothetical prote
29	7	1.7	203	2 C87801	protein C10G11.9 [

30	7	1.7	203	2 T25916	hypothetical prote
31	7	1.7	206	2 AB0605	probable tetr-fam1
32	7	1.7	217	2 S77510	urease accessory p
33	7	1.7	229	1 W4WL8	E4 protein - human
34	7	1.7	244	2 A72551	hypothetical prote
35	7	1.7	247	2 D69453	hypothetical prote
36	7	1.7	249	2 AB3176	hypothetical prote
37	7	1.7	251	2 A24627	calpastatin - pig
38	7	1.7	256	2 AG2324	methionine aminope
39	7	1.7	277	2 JG6142	deoxyguanosine kin
40	7	1.7	287	2 F70361	tRNA-pseudouridine
41	7	1.7	287	2 C75635	phosphoenolpyruvat
42	7	1.7	291	2 T02986	chlorophyll a/b-bi
43	7	1.7	296	2 T40525	hypothetical prote
44	7	1.7	297	1 G69950	6-phosphogluconate
45	7	1.7	297	2 T46414	hypothetical prote

ALIGNMENTS

RESULT 1

A97052  
Probable lytic murein transglycosylase (N-term. LysM motif repeat domain) CAC1232 [impor  
C:Species: Clostridium acetobutylicum  
C:Date: 14-Sep-2001 #sequence\_revision 14-Sep-2001 #text\_change 09-Jul-2004  
C:Accession: A97052  
R:Nolling, J.; Bretton, G.; Omelchenko, M.V.; Markarova, K.S.; Zeng, Q.; Gibson, R.; Lee,  
J.; Daly, M.J.; Bennett, G.N.; Koonin, E.V.; Smith, D.R.  
J. Bacteriol. 183, 4823-4838, 2001  
A:Title: Genome Sequence and Comparative Analysis of the Solvent-Producing Bacterium Clo  
A:Reference number: A96900; MUID:21359325; PMID:21359325  
A:Accession: A97052  
A:Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-253 <KUR>  
A:Cross-references: UNIPROT:Q97UP1; GB:AE001437; PIDN:AAK79204.1; PID:g15024157; GSPDB:B  
A:Experimental source: Clostridium acetobutylicum ATCC824  
C:Genetics:  
A:Gene: CAC1232

Query Match 1.9%; Score 8; DB 2; Length 253;  
Best Local Similarity 100.0%; Pred. No. 12;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 108 LLSPLQLA 115  
|||||  
Db 94 LLSPLQLA 101

RESULT 2

BVECEA  
UDP-3-O-[3-hydroxymyristoyl] N-acetylglucosamine deacetylase (EC 3.5.1.-) - Escherichia  
C:Species: Escherichia coli  
C:Date: 31-Mar-1988 #sequence\_revision 31-Dec-1988 #text\_change 09-Jul-2004  
C:Accession: A28381; S40606; H64731; C23961  
J:Beall, B.; Lutkenhaus, J.  
J. Bacteriol. 169, 5408-5415, 1987  
A:Title: Sequence analysis, transcriptional organization, and insertional mutagenesis of  
A:Reference number: A91852; MUID:88058745; PMID:2824434  
A:Accession: A28381  
A:Molecule type: DNA  
A:Residues: 1-305 <BEA>  
A:Cross-references: UNIPROT:P07652; GB:X55034; GB:M10429; NID:G40841; PIDN:CAA38873.1; P  
R:Yura, T.; Mori, H.; Negai, H.; Nagata, T.; Ishihama, A.; Fujita, N.; Isono, K.; Mizobu  
submitted to the EMBL Data Library, December 1992  
A:Description: Systematic sequencing of the Escherichia coli genome: analysis of the 0-2  
A:Reference number: S40531  
A:Accession: S40606  
A:Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-305 <YUR>  
A:Cross-references: EMBL:D10483; NID:G216434; PIDN:BAA01361.1; PID:g216510

R;Blattner, F.R.; Plunkett III, G.; Bloch, C.A.; Perna, N.T.; Burland, V.; Riley, M.; Cohen, A.; Rose, D.J.; Mau, B.; Shao, Y.  
Science 277, 1453-1462, 1997  
A:Title: The complete genome sequence of *Escherichia coli* K-12.  
A:Reference number: A64720; MUID:97426617; PMID:9278503  
A:Accession: H64731  
A:Status: nucleic acid sequence not shown; translation not shown  
A:Molecule type: DNA  
A:Residues: 1-305 <BLAT>  
A:Cross-references: GB:AE000119; GB:U00096; NID:gl1786283; PIDN:AAC73207.1; PID:gl1786285;  
A:Experimental source: strain K-12, substrain MG1655  
C:Comment: This protein is involved in cell envelope formation and anomalous cell division.  
C:Genetics:  
A:Gene: lpxC; envA  
A:Map position: 2 min  
C:Function:  
A:Pathway: lipid A biosynthesis  
C:Superfamily: envA protein  
C:Keywords: cell division; hydrolase; lipid A biosynthesis

Query Match 1.9%; Score 8; DB 1; Length 305;  
Best Local Similarity 100.0%; Pred. No. 14;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 18 APFVYLLL 25  
| | | | | | | |  
Db 109 APFVYLLL 116

RESULT 3  
AC0519  
UDP-3-O-[3-hydroxymyristoyl] N-acetylglucosamine deacetylase [imported] - *Salmonella enterica*  
C:Species: *Salmonella enterica* subsp. *enterica* serovar Typhi  
A:Note: this species has also been called *Salmonella typhi*  
C:Date: 09-Nov-2001 #sequence\_revision 09-Nov-2001 #text\_change 18-Nov-2002  
R:Parkhill, J.; Dougan, G.; James, K.D.; Thomson, N.R.; Pickard, D.; Wain, J.; Churcher, T.; Connor, P.; Cronin, A.; Davis, P.; Davies, R.M.; Dowd, L.; White, N.; Farrar, S.; Moule, S.; O'Gaora, P.  
Nature 413, 848-852, 2001  
A:Authors: Parry, C.; Quail, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.;  
A:Title: Complete genome sequence of a multiple drug resistant *Salmonella enterica* serovar Typhi  
A:Reference number: AB0502; MUID:21534947; PMID:11677608  
A:Accession: AC0519  
A:Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-305 <PAR>  
A:Cross-references: GB:AL513382; PIDN:CAD01291.1; PID:gl6501419; GSPDB:GN00176  
C:Genetics:  
A:Gene: STY0154  
C:Superfamily: envA protein

Query Match 1.9%; Score 8; DB 2; Length 305;  
Best Local Similarity 100.0%; Pred. No. 14;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 18 APFVYLLL 25  
| | | | | | | |  
Db 109 APFVYLLL 116

RESULT 4  
D85492  
UDP-3-O-[3-hydroxymyristoyl] N-acetylglucosamine deacetylase (EC 3.5.1.-) - *Escherichia coli*  
C:Species: *Escherichia coli*  
C:Date: 16-Feb-2001 #sequence\_revision 16-Feb-2001 #text\_change 09-Jul-2004  
C:Accession: D85492  
R:Perna, N.T.; Plunkett III, G.; Burland, V.; Mau, B.; Glasner, J.D.; Rose, D.J.; Mayhew, M.; Miller, L.; Grobeck, E.J.; Davis, N.W.; Lim, A.; Dimalanta, E.; Potamoudis, K.; Apodaca, Nature 409, 529-533, 2001  
A:Title: Genome sequence of enterohemorrhagic *Escherichia coli* O157:H7.  
A:Reference number: AB5480; MUID:21074935; PMID:11206551

A:Accession: D85492  
A:Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-305 <STO>  
A:Cross-references: UNIPROT:P07652; GB:AE005174; NID:gl2512802; PIDN:AAG54400.1; GSPDB:G1420425  
A:Experimental source: strain O157:H7, substrain EDL933  
C:Genetics:  
A:Gene: lpxC  
C:Superfamily: envA protein  
C:Keywords: hydrolase

Query Match 1.9%; Score 8; DB 2; Length 305;  
Best Local Similarity 100.0%; Pred. No. 14;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 18 APFVYLLL 25  
| | | | | | | |  
Db 109 APFVYLLL 116

RESULT 5  
D90641  
UDP-3-O-[3-hydroxymyristoyl] N-acetylglucosamine deacetylase (EC 3.5.1.-) - *Escherichia coli*  
C:Species: *Escherichia coli*  
C:Date: 18-Jul-2001 #sequence\_revision 18-Jul-2001 #text\_change 09-Jul-2004  
C:Accession: D90641  
R:Hayashi, T.; Makino, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, K.; Han, C.G.; Sasawara, N.; Yasunaga, T.; Kuhara, S.; Shiba, T.; Hattori, M.; Shinagawa, H.  
DNA Res. 8, 11-22, 2001  
A:Title: Complete genome sequence of enterohemorrhagic *Escherichia coli* O157:H7 and genomic islands  
A:Reference number: A99629; MUID:21156231; PMID:11258796  
A:Accession: D90641  
A:Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-305 <HAY>  
A:Cross-references: UNIPROT:P07652; GB:BA000007; PIDN:BA833523.1; PID:gl13359556; GSPDB:G1420425  
A:Experimental source: strain O157:H7, substrain RIMD 0509952  
C:Genetics:  
A:Gene: ECs0100  
C:Superfamily: envA protein  
C:Keywords: hydrolase

Query Match 1.9%; Score 8; DB 2; Length 305;  
Best Local Similarity 100.0%; Pred. No. 14;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 18 APFVYLLL 25  
| | | | | | | |  
Db 109 APFVYLLL 116

RESULT 6  
S67067  
probable membrane protein YOR175c - yeast (*Saccharomyces cerevisiae*)  
N:Alternate names: hypothetical protein O3635  
C:Species: *Saccharomyces cerevisiae*  
C:Date: 12-Jul-1996 #sequence\_revision 12-Jul-1996 #text\_change 09-Jul-2004  
C:Accession: S67067; S67063  
R:Hughes, B.; Pohl, T.M.  
submitted to the Protein Sequence Database, July 1996  
A:Reference number: S66685  
A:Accession: S67067  
A:Molecule type: DNA  
A:Residues: 1-619 <HUG>  
A:Cross-references: UNIPROT:Q08548; EMBL:Z75083; NID:gl420424; PID:e252056; PID:gl420425  
A:Experimental source: strain S288C  
R:Bordone, R.; Camasses, A.; Madania, A.; Martin, R.P.; Poch, O.; Tarasov, I.A.; Winsor, B.P.  
submitted to the Protein Sequence Database, July 1996  
A:Reference number: S67032  
A:Accession: S67063  
A:Molecule type: DNA  
A:Residues: 270-619 <BOR>  
A:Cross-references: EMBL:Z75083; MIPS:YOR175c

A:Experimental source: strain S288C

C:Genetics:

A:Cross-references: SGD:S0005701

A:Map position: 15R

C:Keywords: transmembrane protein

F:53-69/Domain: transmembrane #status predicted <TM1>

F:461-477/Domain: transmembrane #status predicted <TM2>

Query Match 1.9%; Score 8; DB 2; Length 619;

Best Local Similarity 100.0%; Pred. No. 26;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 268 RKQKKLEK 275

DB 500 RKQKKLEK 507

#### RESULT 7

B64049

outer membrane protein hxc homolog - Haemophilus influenzae (strain Rd KW20)

C:Species: Haemophilus influenzae

C:Date: 18-Aug-1995 #sequence\_revision 18-Aug-1995 #text\_change 09-Jul-2004

C:Accession: B64049

R:Fleischmann, R.D.; Adams, M.D.; White, O.; Clayton, R.A.; Kirkness, E.F.; Kerlavage, A.

; Gocayne, J.D.; Scott, J.; Shirley, R.; Liu, L.I.; Glodek, A.; Kelley, J.M.; Weidman, J.

; D.M.; Brandon, R.C.; Fine, L.D.; Fritchman, J.L.; Fuhrmann, J.L.; Geoghagen, N.S.M.

Science 269, 496-512, 1995

A:Authors: Gnehm, C.L.; McDonald, L.A.; Small, K.V.; Fraser, C.M.; Smith, H.O.; Venter,

A:Title: Whole-genome random sequencing and assembly of Haemophilus influenzae Rd.

A:Reference number: A64000; MUID:95350630; PMID:7542800

A:Accession: B64049

A:Status: nucleic acid sequence not shown; translation not shown

A:Molecule type: DNA

A:Residues: 1-744 <TIG>

A:Cross-references: UNIPROT:P44523; GB:U32696; GB:L42023; NID:gl573057; PIDN:AAC21789.1;

Query Match

Best Local Similarity 1.9%; Score 8; DB 2; Length 744;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 250 IFLLVTLV 257

DB 9 IFLLVTLV 16

#### RESULT 8

T34418

hypothetical protein F12F3.3 - Caenorhabditis elegans

C:Species: Caenorhabditis elegans

C:Date: 29-Oct-1999 #sequence\_revision 29-Oct-1999 #text\_change 29-Oct-1999

C:Accession: T34418

R:Pulton, B.; Wohldmann, P.

submitted to the EMBL Data Library, July 1998

A:Description: The sequence of C. elegans cosmid F12F3.

A:Reference number: Z21521

A:Accession: T34418

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1-3488 <FUI>

A:Cross-references: EMBL:U80022; PIN:AAC25885.1; GSPDB:GN00023; CESP:F12F3.3

A:Experimental source: strain Bristol N2; clone F12F3

C:Genetics:

A:Gene: CESP:F12F3.3

A:Map position: 5

A:Introns: 281/3; 332/1; 562/3; 600/3; 1866/3; 1944/3; 3393/1

Query Match

Best Local Similarity 1.9%; Score 8; DB 2; Length 3488;

Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 180 WLKDGKPL 187

DB 1797 WLKDGKPL 1804

#### RESULT 9

F82656

hypothetical protein XF1631 [imported] - Xylella fastidiosa (strain 985C)

C:Species: Xylella fastidiosa

C:Date: 18-Aug-2000 #sequence\_revision 20-Aug-2000 #text\_change 09-Jul-2004

C:Accession: F82656

R:anonymous, The Xylella fastidiosa Consortium of the Organization for Nucleotide Sequen

Nature 406, 151-157, 2000

A:Title: The genome sequence of the plant pathogen Xylella fastidiosa.

A:Reference number: A82515; MUID:20365717; PMID:10910347

A:Note: for a complete list of authors see reference number A59328 below

A:Accession: F82656

A:Status: preliminary

A:Molecule type: DNA

A:Residues: 1-50 <SIM>

A:Cross-references: UNIPROT:Q9PCX3; GB:AE003990; GB:AE003849; NID:g9106683; PIDN:AAF8444

A:Experimental source: strain 985C

R:Simpson, A.J.G.; Reinach, F.C.; Arruda, P.; Abreu, F.A.; Acencio, M.; Alvarenga, R.; A

Briones, M.R.S.; Bueno, M.R.P.; Camargo, A.A.; Camargo, L.E.A.; Carraro, D.M.; Carrer, H

as-Neto, E.; Docena, C.; El-Dorry, H.; Facincani, A.P.; Ferreira, A.J.S.

submitted to GenBank, June 2000

A:Authors: Ferreira, V.C.A.; Ferro, J.A.; Frega, J.S.; Franca, S.C.; Franco, M.C.; Fromm

J.D.; Junqueira, M.L.; Kemper, E.L.; Kitajima, J.P.; Krieger, J.E.; Kuramae, E.E.; Laig

chado, M.A.; Madeira, A.M.B.N.; Madeira, H.M.F.; Marino, C.L.; Marques, M.V.; Martins, E

A:Authors: Martins, E.M.F.; Matsukuma, A.Y.; Menck, C.F.M.; Miracca, E.C.; Miyaki, C.Y.

, F.G.; Nunes, L.R.; Oliveira, M.A.; de Oliveira, M.C.; de Oliveira, R.C.; Palmieri, D.A

Rodrigues, V.; Rosa, A.J. de M.; de Rosa Jr., V.E.; de Sa, R.G.; Santelli, R.V.; Sawasak

A:Authors: da Silva, A.C.R.; da Silva, F.R.; da Silva, A.M.; Silva Jr., W.A.; da Silveir

M.; Tshako, M.H.; Vallada, H.; Van Sluys, M.A.; Verjovski-Almeida, S.; Vettore, A.L.; 2

A:Reference number: A59328

A:Contents: annotation

C:Genetics:

A:Gene: XF1631

Query Match

Best Local Similarity 1.7%; Score 7; DB 2; Length 50;

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 189 NDSRMLL 195

DB 28 NDSRMLL 34

#### RESULT 10

T30399

hypothetical protein ORF52 - Lymantria dispar nuclear polyhedrosis virus

C:Species: Lymantria dispar nuclear polyhedrosis virus, LdNPV

C:Date: 29-Oct-1999 #sequence\_revision 29-Oct-1999 #text\_change 09-Jul-2004

C:Accession: T30399

R:Kuzio, J.; Pearson, M.N.; Harwood, S.H.; Funk, C.J.; Evans, J.T.; Slavicek, J.M.; Rohr

Virology 253, 17-34, 1999

A:Title: Sequence and analysis of the genome of a baculovirus pathogenic for Lymantria d

A:Reference number: Z20836; MUID:99124785; PMID:9887315

A:Accession: T30399

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1-68 <KUZ>

A:Cross-references: UNIPROT:Q9YMS2; EMBL:AF081810; PIDN:AAC70237.1

Query Match

Best Local Similarity 1.7%; Score 7; DB 2; Length 68;

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 363 RSPARSP 369

DB 32 RSPARSP 38

#### RESULT 11

S25601

ubiquinol-cytochrome-c reductase (EC 1.10.2.2) cytochrome b - brine shrimp mitochondrion

R; Barnett, M.J.; Fisher, R.P.; Jones, T.; Komp, C.; Abola, A.P.; Barloy-Hubler, F.; Bowe, J.; Kalman, S.; Keating, D.H.; Palm, C.; Peck, M.C.; Surzycki, R.; Wells, D.H.; Yeh, K.C. Proc. Natl. Acad. Sci. U.S.A. 98, 9883-9888, 2001

A; Title: Nucleotide sequence and predicted functions of the entire *Sinorhizobium meliloti* A; Reference number: A95262; MUID:21396509; PMID:11481432

A; Accession: H95414

A; Status: preliminary

A; Molecule type: DNA

A; Residues: 1-116 <KUR>

A; Cross-references: UNIPROT:Q92XM0; GB:AE006469; PIDN:AAK65882.1; PID:g14524391; GSPDB:G14524391

A; Experimental source: strain 1021, megaplasmid pSymA

R; Galibert, F.; Finan, T.M.; Long, S.R.; Fuhler, A.; Abola, P.; Ampe, F.; Barloy-Hubler, F.; Pella, D.; Chain, P.; Cowie, A.; Davis, R.W.; Dreano, S.; Federspiel, N.A.; Fisher, R.F.; L.; Hyman, R.W.; Jones, T. Science 293, 668-672, 2001

A; Authors: Kahn, D.; Kahn, M.L.; Kalman, S.; Keating, D.H.; Kiss, E.; Komp, C.; Lelaure, H.; Vandenbol, M.; Vorholter, F.J.; Weidner, S.; Wells, D.H.; Wong, K.; Yeh, K. A; Title: The composite genome of the legume symbiont *Sinorhizobium meliloti*. A; Reference number: A96039; MUID:21368234; PMID:11474104

A; Contents: annotation

C; Genetics:

A; Gene: SMA2273

A; Genome: plasmid

Query Match 1.7%; Score 7; DB 2; Length 116;  
Best Local Similarity 100.0%; Pred. No. 57;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 88 IGTLRPD 94  
|||||  
Db 61 IGTLRPD 67

RESULT 14

S17860

phospholipase A2 (EC 3.1.1.4) isoform A1 - leaf-nosed viper

C; Species: *Eristocophis macmahoni* (leaf-nosed viper)

C; Date: 19-Mar-1997 #sequence\_revision 19-Mar-1997 #text\_change 09-Jul-2004

C; Accession: S17860

R; Siddiqui, A.R.; Zaidi, Z.H.; Joernvall, H. Eur. J. Biochem. 201, 675-679, 1991

A; Title: Purification and characterization of two highly different group II phospholipases A2

A; Reference number: S17860; MUID:92037623; PMID:1935962

A; Accession: S17860

A; Status: preliminary

A; Molecule type: protein

A; Residues: 1-121 <SID>

A; Cross-references: UNIPROT:P24293

C; Superfamily: phospholipase A2

C; Keywords: carboxylic ester hydrolase

Query Match 1.7%; Score 7; DB 2; Length 121;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 48 GKSALLS 54  
|||||  
Db 14 GKSALLS 20

RESULT 15

R5DV7

ribosomal protein L7/L12 - *Desulfovibrio vulgaris* (strain Miyazaki)

C; Species: *Desulfovibrio vulgaris*

C; Date: 17-May-1985 #sequence\_revision 17-May-1985 #text\_change 09-Jul-2004

C; Accession: A02769

R; Itoh, T.; Otaka, E. Biochim. Biophys. Acta 789, 229-233, 1984

A; Title: Complete amino-acid sequence of an L7/L12-type ribosomal protein from *Desulfovibrio*

A; Accession: A02769

A; Molecule type: protein

A; Residues: 1-126 <ITO>

A:Cross-references: UNIPROT:P02393  
C:Superfamily: Escherichia coli ribosomal protein L12  
C:Keywords: methylated amino acid; protein biosynthesis; ribosome  
F;76,87/Modified site: N6-methyllysine (Lys) #status experimental

Query Match 1.7%; Score 7; DB 1; Length 126;  
Best Local Similarity 100.0%; Pred.No. 61;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 156 TVLELSE 162  
|||  
Db 16 TVLELSE 22

Search completed: August 3, 2005, 10:10:07  
Job time : 43 secs

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